



PROGRAMME OF
THE EUROPEAN UNION



ESA EO OPERATIONS FRAMEWORK (EOF)
– CSC –
DATA FLOW CONFIGURATION

Prepared by	ESA CSC Operations Team
Document Type	Technical Note
Reference	ESA-EOPG-EOPGC-TN-58
Issue/Revision	1.5
Date of Issue	07/10/2024
Status	Issued

APPROVAL

Title	ESA EO Operations Framework (EOF) – CSC – Data Flow Configuration		
Issue Number	1	Revision Number	5
Author	ESA CSC Operations Team ¹	Date	
Approved By	Head Copernicus Mission Operations Management H/EOP-GCM	Date of Approval	
	Head Copernicus Ground Segment Services, H/EOP-GCS		
	Head Copernicus Ground Segment Systems, H/EOP-GCY		
Authorised By	Head Copernicus Ground Segment and Data management Division, H/EOP-GC		

¹ The document is maintained according to the actual CSC GS operations configuration by the CSC Coordination Desk Service according to the Configuration Management procedures in place

CHANGE LOG

Copernicus Ground Segment Sentinels Data Flow Configuration	Issue Nr	Revision Number	Date
Creation	1	0	04/07/2022
Changes	1	1	09/09/2022
Changes	1	2	06/04/2023
Changes	1	3	20/12/2023
Changes	1	4	21/03/2024
Changes	1	5	07/10/2024

CHANGE RECORD

Issue Number	1	Revision Number	1
--------------	---	-----------------	---

Reason for change		Date	Pages	Paragraph(s)
- Added new S3 Product Types: SR_1_LAN_RD, SR_2_LAN_SI, SR_2_LAN_HY, SR_2_LAN_LI. (as per ESAMSRVCR-11). - Updated CSC GS Applicability for some L0/L1 S3 Product Type - Removed AUX_MOEORB, AUX_PRLPTF, AUX_PRCPTF and AUX_POEORB as duplication of SR___MGNPAX, SR_2_PMPPAX, SR_2_PCPPAX and SR___POEPAX - Added new S3 SIC ADFs (as per ESAMSRVCR-15). - Mission Planning and FOS files - S2 User Level Files		09/09/2022		4.1, 4.2
Issue Number	1	Revision Number	2	
Reason		Date	Pages	Paragraph(s)
- Removed AUX_PREORB filetype from the table of Auxiliary files - Added MPL_TIMELINE, TLM__REQ_A, - Updated S1 Aux table to move MPL files to MP table. - TLM__REQ_B filetype to the Sentinel-2 MP and FOS table - Updated Sentinel-3 Products and Auxiliary Data tables - Updated Sentinel-5p Auxiliary chapter for REP__SUP___ files - added S1X_MP_FULL for S1) - S1 ETAD product types added in S1 products		06/04/2023	7,8,19, 23, 25, 26-44,	2.1, 3.2, 3.3, 4.1, 4.2,
Issue Number	1	Revision Number	3	
Reason		Date	Pages	Paragraph(s)
Added L2__FRESCO to S5P products		18/06/2023	47	5.1
Removed POD as consumer from ADGS for S1 MPL_ORBSCT, added L_PREORB_O		26/06/2023	15	2.2
Added Instrument Radar DB filetype.			18	2.2

Removed TLM__REQ__A from S1 aux data		14	2.1
Changed * (star) reference with numerical reference.	07/07/2023	-	-
Added section 6.1 for Sentinel-6 AUX data (only POD)	19/07/2023	52	6.1
Updated auxiliary tables for DA being POD Client and removed AUX_PRLTPF	29/09/2023	13-14, 22, 33, 38-39, 44	2.2, 3.2, 4.2
Added engineering products dissemination to DA	05/10/2023	7, 20, 29,30,31,32 49,50 ,51	2.1, 3.1, 4.1, 5.1
Added distribution of ADF for all missions in line with Auxdata Portfolio v1.1	19/10/2023	11-15, 21-25, 32-47, 51-53	2.2, 3.2, 4.2, 5.2
Added EW_ETA_AX filetype for S1.		9	2.1
Removed DA distribution for AUX_BGHCHO AUX_BGSO2_ AUX_BGO3__ and AUX_BGCLD,_.		51, 53	5.2
Added missing file types VIIRS_CP VIIRS_DCOMP and VIIRS_CTH.	20/10/2023	31, 34	4.1
Modified footnote 15 (Expert Data hub to Expert Users), Footnote 17 change the year from 2023 to 2022.		39	4.2
Removed Underscore for SR_2_SIC{N,S}AX and SR_2_SIF{N,S}AX products	25/10/2023	16	2.3
Added C-EDRS for MP for MPLC_GOB_P{A,C} and C-FOS for MP for MPL_ORBOEM		9, 13	2.1, 2.2
Removed footnote for ETAD products/ Auxillary data	05/12/2023	11	2.1
- Removed N[1..6]_GRD(F/H/M) and N[1..6]_SLC_1A and added ZE_RAW__0S file types, update of Notch mode to Characterisation mode - Changed Col X-band for AUX_PP1, AUX_CAL, AUX_Ins and AUX_PREORB from C-ADG to C-DA	20/12/2023	12,13	2.2

Issue Number	1	Revision Number	4	
Reason		Date	Pages	Paragraph(s)
Missing MPC column for S3 AUX data		13/02/2024	33-47	4.2
Added level-0 pre-processed granules to S3 Products			29	4.1
Removal of DA access to SR__ROE_AX S3 AUX files			38	4.2
Added Data Acquisition as consumer of MP for MPL_TLEPRE		20/02/2024	16	2.3
- Removed L0__PDQ__, L0__DLQ__, L1B_PQM, L2_O3_TPR, L2VONP_BD3-6-7, L2VOO3_TPR, MPC_O3_TPR from S5 products. Updated S5p Aux section - Added MPC as consumer of DA for			49, 52, 55	5.1, 5.2, 7.4.1
L1B_CA_SIR-UNV and L1B_ENG_DB products			49	5.1
Annex added to track removed products			55	7.x
Removed auxiliary files AUX_BGHCHO, AUX_BGSO2_, AUX_BGO3, AUX_BGCLD_			52, 57	5.2,7.4.2
Addition of AUX_ML2 files		21/02/2024	13	2.2
Removal of S3 products and auxiliary files no longer part of operation baseline		23/02/2024	30, 34, 56	4.1, 4.2, 7.3.1, 7.3.2
OBS_MIMG type replaced by AUX_RDB		04/03/2024	20	2.3
SR_2_ICT{N,S}AX			41	4.2
Addition of AUX_COMB for S3 & S6		05/03/2024	33, 53	4.2, 6.1
Added C-PR for MPC for S3 L0/1/2 production.		18/03/2024	31, 32, 33	4.1
Added S3 new ADFs (ESAMSRVCR-30)			47	4.2
Removed AUX_RESATT from S1 as it is discontinued.			14	2.2
Moved S1 ETAD from products to aux data		21/03/2024	9,10,11	2.1

Issue Number	1	Revision Number	5
Reason	Date	Pages	Paragraph(s)
Removed S3 SR_2_SIT[N,B]AX aux data	04/09/2024	47	4.2
Added CFG_L2_CMR to S5p aux data		56	5.2
Added TM_0_NAT___ for S3 products DA as Consumer of PR		35	4.1
Update of the foot note (3) for S1 L2 BUFR products		13	2.1
Added footnote (13) for S5p to distinguish Products archived only at DLR LTA (i.e. First LTA)		50,51,52	5.1
Renamed AUX_03PPWL changed "0" zero to letter "O".		56	5.2
Removed AUX_O3_M from products paragraph 5.2 and added in removed section		56, 60	5.2, 7.4.2
Removed L0_PDQ___ from products		51, 60	5.1 7.4.1
Updated ICM_CA_SIR (not distributed to/by LTA		53	5.1
Updated ICM_CA_UVN (not distributed to/by LTA		53	5.1
ICM_CA_UVN S5p file type moved from Aux to products		53	5.1
Removed S5P VIIRS products from Data Access Consumer	19/09/2024	56	5.2
Added the L1 for the EN mode (Elevation Notch): SLC, GRDM, GRDH, GRDF and footnote (4)		13, 14	2.1
Added AIS to products		14	2.1
Added AISAUX to auxdata		17	2.2
Added MP_ACQ_B2B to MP/FOS		21	2.3
Added footnote for S1 AMH_ERRMAT and AMV_ERRMAT products section	23/09/2024	17	2.2
Added footnote for AIS AI_RAW__0_		14	2.1
Added footnote for AISAUX.		17	2.2

Sommario

1.1. Scope.....	8
1.2. Applicable and Reference Documents	8
1.3. Acronyms	8
1.4. Definitions and Notes	9
2.1. Sentinel-1 Products	10
2.2. Sentinel-1 Auxiliary Data	14
2.3. Sentinel-1 Mission Planning and FOS Files.....	18
2.4. Sentinel-1 OLQC Reports	22
3.1. Sentinel-2 Products	23
3.2. Sentinel-2 Auxiliary Data	24
3.3. Sentinel-2 Mission Planning and FOS Files.....	28
3.4. Sentinel-2 OLQC Reports	30
4.1. Sentinel-3 Products	31
4.2. Sentinel-3 Auxiliary Data	35
5.1. Sentinel-5P Products.....	51
5.2. Sentinel-5P Auxiliary Data.....	55
6.1. Sentinel-6 Auxiliary Data.....	57
7.1. Sentinel-1 Updates removing dataflows	58
7.2. Sentinel-2 Updates removing dataflows	58
7.3. Sentinel-3 Updates removing dataflows	59
7.3.1. Removed products	59
7.3.2. Removed auxiliary data.....	59
7.4. Sentinel-5p Updates removing dataflows	60

1. INTRODUCTION

1.1. Scope

This document describes the data flow configuration within the Copernicus Ground Segment, identifying the Sentinel products and auxiliary data files managed by each Ground Segment Service and indicating for each type of data managed by a given Service, whether the Service acts as a Provider (P) or as a Consumer (C) of the data.

Possible changes in the operational data flow configuration will be reflected in future updates of this document.

1.2. Applicable and Reference Documents

- [RD-1] ESA EO Operations Framework (EOF) – CSC - Copernicus Sentinel Auxiliary Data Portfolio, [ESA-EOPG-EOPGC-TN-37]
- [RD-2] ESA EO Operations Framework (EOF) – CSC - Copernicus Sentinel Data Portfolio, [ESA-EOPG-EOPGC-TN-12]
- [RD-3] ESA EO Operations Framework (EOF) – CSC - Ground Segment Master ICD [ESA-EOPG-EOPGC-IF-6]
- [RD-4] [RD-EOF-GLO] ESA EO Operations Framework (EOF) – CSC - Ground Segment Operations Glossary [ESA-EOPG-EOPGC-TN-13]

1.3. Acronyms

Acronym	Description
ADG	Auxiliary Data Gathering
AUX	Auxiliary
C	Consumer
C-ADG	Consumer of Auxiliary Data Gathering
C-DA	Consumer of Data Access service
C-FOS	Consumer of Flight Operations Service
C-LTA	Consumer of Long Term Archive
C-MP	Consumer of Mission Planning
C-MPC	Consumer of Mission Performance Cluster
C-POD	Consumer of Precise Orbit Determination

C-PR	Consumer of Production
Col X-Band	Collaborative X-Band Stations
CSC	Copernicus Space Component
DA	Data Access service
ECMWF	European Centre for Medium-Range Weather Forecasts
EUM	EUMETSAT
EDRS	European Data Relay Satellite
E2EM	End-to-End Monitoring
FOS	Flight Operations Service
GNSS	Global Navigation Satellite System
GS	Ground Segment
ICD	Interface Control Document
IERS	International Earth Rotation Service
LTA	Long Term Archiving
MP	Mission Planning
MPC	Mission Performance Cluster
NASA	National Aeronautics and Space Administration
OLQC	On Line Quality Control
P0	Primary Provider
POD	Precise Orbit Determination
PR	Production
Suomi NPP	Suomi National Polar-orbiting Partnership

Note: For further Acronyms definition please refer to [RD-EOF-GLO]

1.4. Definitions and Notes

Originating Provider (P0): refers to the source, i.e. originating entity / GS element

Provider (P): refers to the provider / GS element

Consumer (C): refers to the consuming or receiving entity / GS element

In some cases, consumers can also be providers (e.g. LTA providing data for reprocessing purposes; MPC fetching data from the Data Access service) and providers can also be consumers (e.g. Production services). To indicate the originating GS service for the Consumers, the letter C is followed by the GS service from which the Consumer will pick-up the data. These abbreviations are described in section 0.

2. SENTINEL-1 DATAFLOW CONFIGURATION

2.1. Sentinel-1 Products

Payload	Mode	Level	Type	Product Type	CSC GS Applicability					
					PR	FOS	MPC	LTA	DA	POD
SAR Instrument	SM ¹	L0	RAW	S[1..6]_RAW__0S ²	P0			P	P	
							C-DA	C-PR	C-PR	
				S[1..6]_RAW__0C ²	P0			P	P	
							C-DA	C-PR	C-PR / C-LTA	
				S[1..6]_RAW__0N ²	P0			P	P	
							C-DA	C-PR	C-PR / C-LTA	
				S[1..6]_RAW__0A ²	P0			P	P	
							C-DA	C-PR	C-PR / C-LTA	C-PR
		L1	SLC	S[1..6]_SLC__1S ²	P0				P	
							C-DA		C-PR	
				S[1..6]_SLC__1A ²	P0				P	
							C-DA		C-PR	
			GRD	S[1..6]_GRDF_1S ²	P0				P	
							C-DA		C-PR	
				S[1..6]_GRDF_1A ²	P0				P	
							C-DA		C-PR	
				S[1..6]_GRDH_1S ²	P0				P	
							C-DA		C-PR	
				S[1..6]_GRDH_1A ²	P0				P	
							C-DA		C-PR	
				S[1..6]_GRDM_1S ²	P0				P	
							C-DA		C-PR	
				S[1..6]_GRDM_1A ²	P0				P	
							C-DA		C-PR	

¹ Note: for SM (Strip-Map) mode the product type code S[1..6]<Type> means that there are six different codes one per each number (e.g.: S[1..6]_RAW__0S → S1_RAW__0S, S2_RAW__0S, S3_RAW__0S, S4_RAW__0S, S5_RAW__0S and S6_RAW__0S)

² Note: For product type codes with 2, the 2 corresponds to DH or DV or SH or SV (e.g. IW_RAW__0SDH, IW_RAW__0SSV). Only products matching the product type code followed by DH or DV or SH or SV are relevant. For product type codes without 2, all products matching the product type code are relevant.

Payload	Mode	Level	Type	Product Type	CSC GS Applicability					
					PR	FOS	MPC	LTA	DA	POD
		L2	OCN	S[1..6]_OCN__2S ²	P0				P	
							C-DA		C-PR	
				S[1..6]_OCN__2A ²	P0				P	
							C-DA		C-PR	
	IW	L0	RAW	IW_RAW__0S ²	P0			P	P	
							C-DA	C-PR	C-PR	
				IW_RAW__0C ²	P0			P	P	
							C-DA	C-PR	C-PR / C-LTA	
				IW_RAW__0N ²	P0			P	P	
							C-DA	C-PR	C-PR / C-LTA	
				IW_RAW__0A ²	P0			P	P	
							C-DA	C-PR	C-PR / C-LTA	C-PR
		L1	SLC	IW_SLC__1S ²	P0				P	
							C-DA		C-PR	
				IW_SLC__1A ²	P0				P	
							C-DA		C-PR	
			GRD	IW_GRDH__1S ²	P0				P	
							C-DA		C-PR	
				IW_GRDH__1A ²	P0				P	
							C-DA		C-PR	
			GRD	IW_GRDM__1S ²	P0				P	
							C-DA		C-PR	
			GRD	IW_GRDM__1A ²	P0				P	
							C-DA		C-PR	
		L2	OCN	IW_OCN__2S ²	P0				P	
							C-DA		C-PR	
				IW_OCN__2A ²	P0				P	
							C-DA		C-PR	
	EW	L0	RAW	EW_RAW__0S ²	P0			P	P	
							C-DA	C-PR	C-PR	
				EW_RAW__0C ²	P0			P	P	
							C-DA	C-PR	C-PR / C-LTA	
				EW_RAW__0N ²	P0			P	P	
				EW_RAW__0A ²	P0					

Payload	Mode	Level	Type	Product Type	CSC GS Applicability							
					PR	FOS	MPC	LTA	DA	POD		
							C-DA	C-PR	C-PR / C-LTA			
					P0			P	P			
				EW_RAW__0A ²			C-DA	C-PR	C-PR / C-LTA	C-PR		
					P0				P			
		L1	SLC	EW_SLC__1S ²	P0				P			
							C-DA		C-PR			
				EW_SLC__1A ²	P0				P			
							C-DA		C-PR			
			GRD	EW_GRDH_1S ²	P0				P			
							C-DA		C-PR			
				EW_GRDH_1A ²	P0				P			
							C-DA		C-PR			
				EW_GRDM_1S ²	P0				P			
							C-DA		C-PR			
					EW_GRDM_1A ²	P0				P		
								C-DA		C-PR		
		L2	OCN	EW_OCN__2S ²	P0				P			
							C-DA		C-PR			
				EW_OCN__2A ²	P0				P			
							C-DA		C-PR			
		WV	L0	RAW	WV_RAW__0S	P0			P	P		
								C-DA	C-PR	C-PR / C-LTA		
					WV_RAW__0C	P0			P	P		
								C-DA	C-PR	C-PR / C-LTA		
	WV_RAW__0N				P0			P	P			
							C-DA	C-PR	C-PR / C-LTA			
	WV_RAW__0A				P0			P	P			
							C-DA	C-PR	C-PR / C-LTA	C-PR		
	L1				SLC	WV_SLC__1S	P0				P	
									C-DA		C-PR	
		WV_SLC__1A				P0				P		
								C-DA		C-PR		
		GRD	WV_GRDM_1S	P0				P				
						C-DA		C-PR				
WV_GRDM_1A	P0				P							

Payload	Mode	Level	Type	Product Type	CSC GS Applicability							
					PR	FOS	MPC	LTA	DA	POD		
							C-DA		C-PR			
		L2	OCN	WV_OCN__2S	P0				P			
							C-DA		C-PR			
				WV_OCN__2A	P0				P			
							C-DA		C-PR			
		BUFR ³ products	P0									
	RF Characterisation	L0	RAW	RF_RAW__0S	P0			P	P			
								C-DA	C-PR	C-PR / C-LTA		
	Elevation Notch Modes			EN_RAW__0S	P0			P	P			
								C-DA	C-PR	C-PR / C-LTA		
	Azimuth Notch Mode			N[1..6]_RAW__0S	P0			P	P			
								C-DA	C-PR	C-PR / C-LTA		
	Noise Characterisation Mode (for SM, IW, EW, WV in order)			Z[1..6]_RAW__0S	P0			P	P			
								C-DA	C-PR	C-PR / C-LTA		
				ZI_RAW__0S	P0			P	P			
								C-DA	C-PR	C-PR / C-LTA		
				ZE_RAW__0S	P0			P	P			
								C-DA	C-PR	C-PR / C-LTA		
				ZW_RAW__0S	P0			P	P			
								C-DA	C-PR	C-PR / C-LTA		
	-			-	Orbit and Burst Synchronisation	___OBS__SS	P0				P	
										C-DA		C-PR
	Elevation Notch Modes	L1	SLC	EN_SLC__1S ⁴			P0					
				EN_GRDM_1S ⁴			P0					

³ Provided only to authorised Meteo centres through Collaborative hub

⁴ Generated during IOC and ad hoc calibration campaign by MPC and provided directly to ESTEC users

Payload	Mode	Level	Type	Product Type	CSC GS Applicability					
					PR	FOS	MPC	LTA	DA	POD
			GRD	EN_GRDH_1S ⁴			P0			
				EN_GRDF_1S ⁴			P0			
GPS	-	L0	RAW	GP_RAW__0_	P0			P		
								C-PR	C-PR	C-PR
HKTM	-	L0	RAW	HK_RAW__0_	P0			P		
						C-PR		C-PR		
AIS instrument	AIS	L0	RAW	AI_RAW__0_ ⁵	P0			P	P	
								C-PR	C-PR	

Additional Notes:

- SM, IW and WV GRDM products are currently not produced as part of the CSC operations baseline.

2.2. Sentinel-1 Auxiliary Data

Product Type	Description	CSC GS Applicability								
		FOS	MP	ADG	POD	MPC	PR	LTA	DA	Col X-Band
AUX_ML2	The Processor Parameters Auxiliary Data contains parameters to support management of S1 machine learning algorithms (L2 Machine Learning Models).			P		P0		P	P	
				C-MPC			C-ADG	C-ADG	C-ADG	
AUX_PP1	The Processor Parameters Auxiliary Data contains parameters and options for configuring the L1 processing performed within the IPF.			P		P0		P	P	
				C-MPC			C-ADG	C-ADG	C-ADG	C-DA
AUX_CAL	The Calibration Auxiliary Data contains parameters used to correct and calibrate the imagery during processing.			P		P0		P	P	
				C-MPC			C-ADG	C-ADG	C-ADG	C-DA
AUX_INS	The Instrument Auxiliary Data contains information			P		P0		P	P	

⁵ For Sentinel-1C and Sentinel-1D units only

Product Type	Description	CSC GS Applicability								
		FOS	MP	ADG	POD	MPC	PR	LTA	DA	Col X-Band
	about the SAR instrument that is required by the IPF for image processing.			C-MPC			C-ADG	C-ADG	C-ADG	C-DA
AUX_PP2	The Processor Parameters Auxiliary Data contains parameters and options for configuring the L2 processing performed within the IPF.			P		P0		P	P	
				C-MPC			C-ADG	C-ADG	C-ADG	
AUX_SCS	The OSW processing algorithm requires a lookup table to predict the modulation transfer function (MTF) and to remove non-linear effects from the cross spectra.			P		P0		P	P	
				C-MPC			C-ADG	C-ADG	C-ADG	
AUX_SCF	L1 SETAP configuration file controlling the dynamic behaviour of the SETAP processor			P		P0		P	P	
				C-MPC			C-ADG	C-ADG	C-ADG	
AUX_ITC	L1 SETAP configuration file holding instrument timing calibration data			P		P0		P	P	
				C-MPC			C-ADG	C-ADG	C-ADG	
AUX_PREORB	Predicted Orbit File			P	P0			P	P	
				C-POD		C-ADG / C-DA	C-ADG	C-ADG	C-POD	C-DA
AUX_POEORB	Precise Ephemeris Orbit auxiliary data containing orbit state vectors based on the orbit determination performed by the POD service and used for offline processing. They are the most precise set of orbit state vectors.			P	P0			P	P	
				C-POD		C-ADG / C-DA	C-ADG	C-ADG	C-POD	

Product Type	Description	CSC GS Applicability								
		FOS	MP	ADG	POD	MPC	PR	LTA	DA	Col X-Band
AUX_RESORB	Restituted Orbit auxiliary data containing orbit state vectors (OSV) based on the orbit determination performed by the POD service and used for near-real-time processing.			P	P0			P	P	
				C-POD		C-ADG / C-DA	C-ADG	C-ADG	C-POD	
AUX_GNSSRD	Daily GNSS L1b RINEX files				P0				P	
									C-POD	
AUX_PROQUA	Processed Quaternions Files				P0				P	
									C-POD	
S[1..6]_ETA__AX	ETAD SAR SM Level A						P0		P	
						C-DA		C-PR	C-PR	
IW_ETA__AX	ETAD SAR IW Level A						P0		P	
						C-DA		C-PR	C-PR	
EW_ETA__AX	ETAD SAR EW Level A						P0		P	
						C-DA		C-PR	C-PR	
AUX_WND	The ECMWF atmospheric model provides wind speed and direction at 10 m above the sea surface.			P0				P	P	
						C-ADG / C-DA	C-ADG	C-ADG	C-ADG	
AUX_WAV	The Wavewatch III model provides surface stockes drift velocity and direction necessary for the interpretation of the RVL component of the L2 OCN product.			P0				P	P	
						C-ADG / C-DA	C-ADG	C-ADG	C-ADG	
AUX_ICE	Sea ice auxiliary data is used to estimate the percentage of the image covered by ice. Used to process the OWI component of the L2 OCN products.			P0				P	P	
						C-ADG / C-DA	C-ADG	C-ADG	C-ADG	
AUX_TRO	Tropospheric model Auxiliary Data			P0				P	P	
						C-ADG / C-DA	C-ADG	C-ADG	C-ADG	

Product Type	Description	CSC GS Applicability								
		FOS	MP	ADG	POD	MPC	PR	LTA	DA	Col X-Band
AUX_TEC	Ionospheric model Auxiliary Data			P0				P	P	
						C-ADG / C-DA	C-ADG	C-ADG	C-ADG	
AMH_ERRMAT ⁶	Excitation coefficients error matrix auxiliary data is used to derive accurate Doppler estimation using an antenna model for the RVL component of the L2 OCN product.			P			P0	P	P	
AMV_ERRMAT ⁶				C-PR		C-ADG / C-DA		C-PR	C-ADG	
AUX_OBMEMC	On-Board Memory Configuration Update		P0	P						
				C-MP			C-ADG			
TLM__REQ_B	EDAS telemetry extraction files for prototype RVL production	P0		P						
TLM__REQ_C				C-FOS		C-ADG				
TLM__REQ_D	Manoeuvre Planning: Manoeuvre Acceleration Profile File (Manoeuvre History File)	P0		P						
TLM__REQ_E				C-FOS	C-ADG					
TLM__REQ_F	Manoeuvre Planning: Manoeuvre Calibration Scale Factor File	P0		P						
				C-FOS	C-ADG					
REP__MACP_	Manoeuvre Planning: Satellite Mass Properties Report	P0		P						
				C-FOS	C-ADG					
REP__MCSF_	The Sentinel-1 AIS Auxiliary product: it consists in a list of decoded AIS messages in XML format.	P0		P						
				C-FOS	C-ADG					
REP__SMPR_		P0		P						
				C-FOS	C-ADG					
AISAX ⁵							P0	P	P	
								C-PR	C-PR	

⁶ ERRMAT products are currently not produced as part of the CSC operations baseline, foreseen Q4 2024

2.3. Sentinel-1 Mission Planning and FOS Files

Product Type	Description	CSC GS Applicability								
		FOS	MP	ADG	POD	MPC	PR	EDRS	DATA ACQUISITION	Col X-Band
MPL__NPPF_	Nominal Payload Planning File		P0							
		C-MP								
MPL_OCMSAR	Acquisition Over OCM timeline		P0							
		C-MP								
MPL__NPIF_	Nominal Plan Increment File (	P0								
			C-FOS							
MPL_ORBSCT	Reference Orbit Scenario File		P0	P						
				C-MP			C-ADG			
MPL_ORBPRES	FOS Predicted Orbit	P0		P						
			C-FOS	C-FOS	C-ADG	C-ADG	C-ADG			C-ADG
MPL_ORBRES	FOS Restituted Orbit	P0		P						
				C-FOS	C-ADG					
L_PREORB_O	Long Term Predicted Orbit File - OEM	P0		P						
				C-FOS	C-ADG					
MPL_TLEPRE	FOS TLE Predicted Orbit	P0	P	P						
			C-FOS	C-FOS					C-MP	C-MP
REP_NPIFCC	NPIF Constraint Check Report	P0								
			C-FOS							
MPL__SSC_	S-Band Station Plan View	P0								
			C-FOS							
TLM__PSCAT	Packet Store Catalogue	P0								
			C-FOS							

Product Type	Description	CSC GS Applicability								
		FOS	MP	ADG	POD	MPC	PR	EDRS	DATA ACQUISITION	Col X-Band
REP__FCHF__	FOS Filtered TC history	P0								
			C-FOS							
REP__FCHF__	FOS TC History	P0								
			C-FOS							
TLM__REQ_A	TM Parameter Data	P0								
			C-FOS							
MPL_GOB_PA	EDRS-A Predicted Orbit File		P					P0		
		C-MP	C-EDRS							
MPL_GOB_PC	EDRS-C Predicted Orbit File		P					P0		
		C-MP	C-EDRS							
MPL_OCMSAR	Acquisition Over OCM timeline		P0							
		C-MP								
MPL_OPF_AL	Alphasat Operations Planning File		P0							
		C-MP								
MPL_MEM__M TL	Memory Estimation file		P0							
		C-MP								
MPL_ORBOEM	LEO Orbit Ephemeris Message (OEM)	P0	P							
			C-FOS					C-MP		
REP__SUP__	FOS + Satellite Unavailability Reports	P0		P						
			C-FOS	C-FOS	C-ADG					
REP_MP_MP	Mission planning Report		P0	P						
				C-MP		C-ADG				
MPL_MANPRE	Manoeuvre Planning: Manoeuvre Prediction File	P0		P						
			C-FOS	C-FOS	C-ADG					
MP_ALL__	S1 acquisition and downlink timeline		P0	P						
				C-MP		C-ADG				

Product Type	Description	CSC GS Applicability								
		FOS	MP	ADG	POD	MPC	PR	EDRS	DATA ACQUISITION	Col X-Band
MPL_TIMELINE	S1 Mission planning files		P0	P						
				C-MP			C-ADG			
MPL_RQn_OC	EDRS-C Required link list		P0							
								C-MP		
MPL_RQn_OA	EDRS-A Required link list		P0							
								C-MP		
MPL_LAS_OA	EDRS-A LTP Availability Schedule for OISL							P0		
			C-EDRS							
MPL_LAS_OC	EDRS-A LTP Availability Schedule for OISL							P0		
			C-EDRS							
MPL_MAS_OA	EDRS-C MTP/STP Availability Schedule for OISL							P0		
			C-EDRS							
MPL_MAS_OC	EDRS-C MTP/STP Availability Schedule for OISL							P0		
			C-EDRS							
MPL_CRn_OA	EDRS-A Link Status Confirmation							P0		
			C-EDRS							
MPL_CRn_OC	EDRS-C Link Status Confirmation							P0		
			C-EDRS							
MPL_SSn_OA	S1 EDRS-A Communication Schedule							P0		
			C-EDRS							
MPL_SSn_OC	S1 EDRS-C Communication							P0		

Product Type	Description	CSC GS Applicability								
		FOS	MP	ADG	POD	MPC	PR	EDRS	DATA ACQUISITION	Col X-Band
	ion Schedule		C-EDRS							
MPL_ERn_O#	Error Message File							P0		
			C-EDRS							
MP_FULL	geographical coverage info for DT in the Acq Plan		P0	P						
				C-MP		C-ADG				
SER_SRn_OA	EDRS-A Link Execution Status							P0		
			C-EDRS							
SER_SRn_OC	EDRS-C Link Execution Status							P0		
			C-EDRS							
MPL_SP	Station Acquisition Plan		P0							
									C-MP	C-MP
AUX_RDB	Radar Database (RDB)					P0				
		C-MPC								
Instrument Radar Data Base zipped	Radar Database (RDB) In xml (Industry) format	P0								
						C-FOS				
MP_ACQ_B2B	EVQR records for burst sync monitoring of S1 EW/IW products (in csv format)		P0	P						
				C-MP		C-ADG				

Additional Notes:

- Some files are currently not part of the operational baseline. They are expected to become operational in the future and are included for completeness.
- Since the decommissioning of EDS interface on the 25/09/2024, the MP files are nominally delivered by the MP IP interface.

2.4. Sentinel-1 OLQC Reports

The On-Line Quality Control (OLQC) performs essential quality checks on each product generated by the processing chain. The results of the quality checks are presented as XML reports.

Product Type Code	CSC GS Applicability				
	PR	E2EM	MPC	LTA	DA
OLQC	P0	C-PR	C-PR		

3. SENTINEL-2 DATAFLOW CONFIGURATION

3.1. Sentinel-2 Products

Payload	Level	Type	Product Type Code	CSC GS Applicability					
				POD	PR	FOS	MPC	LTA	DA
Multi-Spectral Instrument (MSI)	L0	Level-0 Datastrip	MSI_L0_DS		P0			P	P
							C-DA	C-PR	C-PR / C-LTA
		Level-0 Granule	MSI_L0_GR		P0			P	P
							C-DA	C-PR	C-PR / C-LTA
	L1	Level-1A Datastrip	MSI_L1A_DS		P0				P
							C-DA		C-PR
		Level-1A Granule	MSI_L1A_GR		P0				P
							C-DA		C-PR
		Level-1B Datastrip	MSI_L1B_DS		P0				P
							C-DA		C-PR
		Level-1B Granule	MSI_L1B_GR		P0				P
							C-DA		C-PR
		Level-1C Datastrip	MSI_L1C_DS		P0				P
							C-DA		C-PR
		Level-1C Tile	MSI_L1C_TL		P0				P
							C-DA		C-PR
		Level-1C True Colour Image	MSI_L1C_TC		P0				P
							C-DA		C-PR
	L2	Level-2A Datastrip	MSI_L2A_DS		P0				P
							C-DA		C-PR
		Level-2A Tile	MSI_L2A_TL		P0				P
							C-DA		C-PR
		Level-2A True Colour Image	MSI_L2A_TC		P0				P
							C-DA		C-PR
HKTM	L0	Housekeeping Telemetry Data	PRD_HKTM__		P0			P	
						C-PR		C-PR	
SAD	AUX	Satellite Ancillary Data	AUX_SADATA		P0			P	P
				C-PR				C-PR	C-POD / C-PR
N/A	L1C	Level-1C Sentinel SAFE	MSIL1C.SAFE				C-DA		P0
N/A	L2A	Level-2A Sentinel SAFE	MSIL2A.SAFE				C-DA		P0

3.2. Sentinel-2 Auxiliary Data

Product Type	Description	CSC GS Applicability							
		FOS	MP	ADG	POD	MPC	PR	LTA	DA
AUX_GNSSRD	Daily GNSS L1b RINEX files				P0				P
									C-POD
AUX_PROQUA	Processed Quaternions Files				P0				P
									C-POD
AUX_POEORB	Precise Orbit Ephemeris (POE) Orbit file				P0				P
									C-POD
AUX_ECMWFD	Auxiliary Data File which contains weather forecast parameters for 3 geophysical variables: total column ozone, total column water vapour and mean sea level pressure.			P0				P	P
						C-DA	C-ADG	C-ADG	C-ADG
AUX_UT1UTC	The International Earth Rotation Service (IERS) Bulletin A, which contains rapid determinations for earth orientation parameters (Earth orientation parameters x/y pole, UT1-UTC and their errors).			P0				P	P
						C-DA	C-ADG	C-ADG	C-ADG
AUX_CAMSFO	Copernicus CAMS 'Forecast' Dataset with a sub-selection of 10 geophysical variables			P0				P	P
						C-DA	C-ADG	C-ADG	C-ADG
AUX_CAMSAN ⁷	Copernicus CAMS 'Analysis' Dataset			P0				P	P
						C-ADG		C-ADG	C-ADG
AUX_CAMSRE ⁶	Copernicus CAMS 'Re-analysis' Dataset			P0				P	P
						C-ADG		C-ADG	C-ADG
GIP_ATMIMA	IAS AnaTm image parameters file (Type_1)			P		P0		P	P
				C-MPC		C-DA	C-ADG	C-ADG	C-ADG
GIP_ATMSAD	IAS AnaTm image parameters file (Type_1)			P		P0		P	P
				C-MPC		C-DA	C-ADG	C-ADG	C-ADG
GIP_DATATI	IAS Datation parameters file			P		P0		P	P

⁷ These files will be provided by the Reprocessing Preparation Package to the LTA and other GS Services via ad-hoc means in preparation of the Sentinel-2 reprocessing campaign.

Product Type	Description	CSC GS Applicability							
		FOS	MP	ADG	POD	MPC	PR	LTA	DA
	(Type_1)			C-MPC		C-DA	C-ADG	C-ADG	C-ADG
GIP_LREXTR	LR Extraction parameters file (Type_1)			P		P0		P	P
				C-MPC		C-DA	C-ADG	C-ADG	C-ADG
GIP_INVLOC	InitLoc Inv parameters file (Type_1)			P		P0		P	P
				C-MPC		C-DA	C-ADG	C-ADG	C-ADG
GIP_VIEDIR	Pixel line of sight for each bands in the focal plane reference frame (Type_1)			P		P0		P	P
				C-MPC		C-DA	C-ADG	C-ADG	C-ADG
GIP_SPAMOD	Platform model (Type_1)			P		P0		P	P
				C-MPC		C-DA	C-ADG	C-ADG	C-ADG
GIP_BLINDP	List of blind pixels (Type_1)			P		P0		P	P
				C-MPC		C-DA	C-ADG	C-ADG	C-ADG
GIP_CLOINV	CloudInv parameter file (Type_1)			P		P0		P	P
				C-MPC		C-DA	C-ADG	C-ADG	C-ADG
GIP_CLOPAR	Cloud mask file			P		P0		P	P
				C-MPC		C-DA	C-ADG	C-ADG	C-ADG
GIP_PRDLOC	InitLoc production parameters file (Type_1)			P		P0		P	P
				C-MPC		C-DA	C-ADG	C-ADG	C-ADG
GIP_R2PARA	RadioS2 parameters file (Type_1)			P		P0		P	P
				C-MPC		C-DA	C-ADG	C-ADG	C-ADG
GIP_R2SWIR	SWIR detectors arrangement parameters (Type_1)			P		P0		P	P
				C-MPC		C-DA	C-ADG	C-ADG	C-ADG
GIP_R2EQOG	Radiometric equalization parameters on ground (on-ground correction) (Type_1)			P		P0		P	P
				C-MPC		C-DA	C-ADG	C-ADG	C-ADG
GIP_R2DEPI	List of defective pixels (Type_1)			P		P0		P	P
				C-MPC		C-DA	C-ADG	C-ADG	C-ADG
GIP_R2DEFI	Deconvolution filter for each deconvoluted band (Type_1)			P		P0		P	P
				C-MPC		C-DA	C-ADG	C-ADG	C-ADG
GIP_R2WAFI	Wavelets filters (Type_1)			P		P0		P	P
				C-MPC		C-DA	C-ADG	C-ADG	C-ADG
GIP_R2L2NC	L2 Norm coefficients (denoising) (Type_1)			P		P0		P	P
				C-MPC		C-DA	C-ADG	C-ADG	C-ADG
GIP_R2DENT	Denoising thresholds (denoising) (Type_1)			P		P0		P	P
				C-MPC		C-DA	C-ADG	C-ADG	C-ADG

Product Type	Description	CSC GS Applicability							
		FOS	MP	ADG	POD	MPC	PR	LTA	DA
GIP_R2DECT	Threshold file for deconvolution through wavelet Packets (Type_1)			P		P0		P	P
				C-MPC		C-DA	C-ADG	C-ADG	C-ADG
GIP_R2NOMO	Noise model (denoising) (Type_1)			P		P0		P	P
				C-MPC		C-DA	C-ADG	C-ADG	C-ADG
GIP_R2ABCA	Absolute calibration parameters (Type_1)			P		P0		P	P
				C-MPC		C-DA	C-ADG	C-ADG	C-ADG
GIP_R2BINN	Binning for 60m bands parameters (filters and undersampling) (Type_1)			P		P0		P	P
				C-MPC		C-DA	C-ADG	C-ADG	C-ADG
GIP_R2CRCO	Crosstalk correction (Type_1)			P		P0		P	P
				C-MPC		C-DA	C-ADG	C-ADG	C-ADG
GIP_G2PARA	GeoS2 parameters file (preProc) (Type_1)			P		P0		P	P
				C-MPC		C-DA	C-ADG	C-ADG	C-ADG
GIP_G2PARE	Geometric parameter to refine (Type_1)			P		P0		P	P
				C-MPC		C-DA	C-ADG	C-ADG	C-ADG
GIP_EARMOD	Earth model (Type_1)			P		P0		P	P
				C-MPC		C-DA	C-ADG	C-ADG	C-ADG
GIP_GEOPAR	Global geometrical parameters (Type_1)			P		P0		P	P
				C-MPC		C-DA	C-ADG	C-ADG	C-ADG
GIP_INTDET	Description of the inter detectors overlapping area (Type_1)			P		P0		P	P
				C-MPC		C-DA	C-ADG	C-ADG	C-ADG
GIP_TILPAR	TilingS2 parameters file (Type_1)			P		P0		P	P
				C-MPC		C-DA	C-ADG	C-ADG	C-ADG
GIP_RESPAR	ResamplesS2 parameters file (preProc) (Type_1)			P		P0		P	P
				C-MPC		C-DA	C-ADG	C-ADG	C-ADG
GIP_MASPAR	MaskS2 parameters file (Type_1)			P		P0		P	P
				C-MPC		C-DA	C-ADG	C-ADG	C-ADG
GIP_JP2KPA	Compression JP2K parameters file (Type_2)			P		P0		P	P
				C-MPC		C-DA	C-ADG	C-ADG	C-ADG
GIP_ECMWFP	ECMWF parameters file (Type_2)			P		P0		P	P
				C-MPC		C-DA	C-ADG	C-ADG	C-ADG
GIP_DECOMP	On board decompression parameters file (Type_2)			P		P0		P	P
				C-MPC		C-DA	C-ADG	C-ADG	C-ADG

Product Type	Description	CSC GS Applicability							
		FOS	MP	ADG	POD	MPC	PR	LTA	DA
GIP_OLQCPA	OLQC configuration parameters file (Type_2)			P		P0		P	P
				C-MPC		C-DA	C-ADG	C-ADG	C-ADG
GIP_PROBAS	Processing Baseline parameters (Type_2)			P		P0		P	P
				C-MPC		C-DA	C-ADG	C-ADG	C-ADG
GIP_CONVER	Mapping parameters from 16 to 18 bits (Type_2)			P		P0		P	P
				C-MPC		C-DA	C-ADG	C-ADG	C-ADG
GIP_R2EOB2	Radiometric equalization parameters on board (dark current, on-board inter pixel calibration) (Type_3)			P		P0		P	P
				C-MPC		C-DA	C-ADG	C-ADG	C-ADG
GIP_L2ACAC	Calibration parameter for the atmospheric correction algorithm			P		P0		P	P
				C-MPC		C-DA	C-ADG	C-ADG	C-ADG
GIP_L2ACSC	Calibration parameter for the scene classification algorithm			P		P0		P	P
				C-MPC		C-DA	C-ADG	C-ADG	C-ADG
GIP_PROBA2	Processing baseline identifier of the generated L2A products			P		P0		P	P
				C-MPC		C-DA	C-ADG	C-ADG	C-ADG
GIP_HRTPAR	To configure a high or low resolution for the processing			P		P0		P	P
				C-MPC		C-DA	C-ADG	C-ADG	C-ADG
AUX_GRIXXX ⁸	Global Reference Image provided to the Sentinel-2 operational processor, for the Level-1B product generation					P0		P	
							C-MPC	C-MPC	

Additional Notes:

- The list of product types originating from FOS is not exhaustive. Files originating from FOS and used only for Mission Planning purposes are not included here.

⁸ Archived manually ad-hoc, as a one-off.
Where: XXX = Relative Orbit (001-143)

3.3. Sentinel-2 Mission Planning and FOS Files

Product Type	Description	CSC GS Applicability						
		FOS	MP	ADG	POD	MPC	PR	Data Acquisition
MPL_ORBPRES	FOS Predicted Orbit	P0	P	P				
			C-FOS	C-FOS	C-ADG	C-ADG		
MPL_ORBRES	FOS Restituted Orbit	P0	P	P				
			C-FOS	C-FOS	C-ADG	C-ADG		
MPL_TLEPRE	FOS TLE Predicted Orbit	P0	P					
			C-FOS					
MPL__NPIF_	Nominal Plan Increment File	P0						
			C-FOS					
MPL_MANPRE	Predicted Manoeuvre Information	P0						
			C-FOS	C-FOS	C-ADG			
MPL_ORBOEM_	LEO Orbit Ephemeris Message	P0						
			C-FOS					
MPL_MOCRXX	Moon Calibration Opportunity Report	P0						
			C-FOS					
MPL__NPPF_	Nominal Payload Planning File		P0					
		C-MP						
MPL_ORBSCT	Reference Orbit Scenario File		P0					
		C-MP						
MPL_TIMELINE	S2 acquisition and downlink timeline file		P0	P				
				C-MP			C-ADG	
REP_NPIFCC	Constraint Check Report	P0						

			C-FOS					
REP__SUP__	FOS + Satellite Unavailability Reports	P0						
			C-FOS	C-FOS	C-ADG			
REP__FCHF__	FOS Filtered TC History file	P0						
			C-FOS	CFOS				
REP__CHF__	FOS TC History	P0						
			C-FOS	C-FOS				
REP__MACP__	Manoeuvre Acceleration Profile File	P0		P				
				C-FOS	C-ADG			
REP__MCFS__	Manoeuvre Calibration Scale Factor File	P0		P				
				C-FOS	C-ADG			
REP__SMPR__	Satellite Mass Properties Report	P0		P				
				C-FOS	C-ADG			
L__PREORB__X	Long Term Predicted Orbit File - XML	P0						
				C-FOS	C-ADG			
L__PREORB__O	Long Term Predicted Orbit File - OEM	P0						
				C-FOS	C-ADG			
TLM__REQ__A	Telemetry Parameter data files AOCS	P0		P				
				C-FOS		C-ADG		
TLM__REQ__B	Telemetry Parameter data files MMFU	P0		P				
				C-FOS		C-ADG		

Additional Notes:

- Since the decommissioning of EDS interface on the 25/09/2024, the MP files are nominally delivered by the MP IP interface.

3.4. Sentinel-2 OLQC Reports

The On-Line Quality Control (OLQC) performs essential quality checks on each product generated by the processing chain. The results of the quality checks are presented as XML reports.

Product Type Code	CSC GS Applicability				
	PR	E2EM	MPC	LTA	DA
REP_OLQCPA	P0	C-PR	C-PR		

4. SENTINEL-3 DATAFLOW CONFIGURATION

4.1. Sentinel-3 Products

Payload	Level	Description	Product Type	CSC GS Applicability					
				PR	MPC	LTA	DA	EUM	POD
DORIS	L0	DORIS DOP L0 pre-processed granules	DO_0_DOP__G	P0					
								C-PR	
			DO_0_DOP__	P0			P		
					C-DA	C-PR	C-PR		
		DORIS NAV L0 pre-processed granules	DO_0_NAV__G	P0					
								C-PR	
		Doris Navigation packets including Doppler datation and test packets	DO_0_NAV__	P0			P		
					C-DA	C-PR	C-PR		C-PR
GNSS	L0	GNSS measurements L0 pre-processed granules	GN_0_GNS__G	P0					
								C-PR	
			GN_0_GNS__	P0			P		
					C-DA	C-PR	C-PR		C-PR
MWR	L0	MWR observation and calibration L0 pre-processed granules	MW_0_MWR__G	P0					
								C-PR	
			MW_0_MWR__	P0			P		
					C-DA	C-PR	C-PR		
	L1	Level 1 calibration and monitoring MWR data	MW_1_CAL__	P0			P		
					C-PDA	C-PR	C-PR		
			MW_1_MWR__	P0			P		
					C-DA		C-PR		
			OL_0_CR0__G	P0					

Payload	Level	Description	Product Type	CSC GS Applicability					
				PR	MPC	LTA	DA	EUM	POD
OLCI	L0	OLCI Calibration (without spectral relaxation) L0 pre-processed granules						C-PR	
		Calibration with no spectral relaxation	OL_0_CR0__	P0			P		
					C-PR / C-DA	C-PR	C-PR		
		OLCI (with spectral relaxation) L0 pre-processed granules	OL_0_CR1__G	P0					
								C-PR	
		Calibration with spectral relaxation	OL_0_CR1__	P0			P		
					C-PR / C-DA	C-PR	C-PR		
		OLCI observation L0 pre-processed granules	OL_0_EFR__G	P0					
								C-PR	
		Full Resolution ISPs	OL_0_EFR__	P0			P		
					C-PR / C-DA	C-PR	C-PR		
	L1	Full Resolution top of atmosphere	OL_1_EFR__	P0			P		
					C-PR / C-DA		C-PR		
		Reduced Resolution top of atmosphere	OL_1_ERR__	P0			P		
					C-PR / C-DA		C-PR		
		Dark offset and gain coefficients from radiometric calibration	OL_1_RAC__	P0			P		
					C-PR / C-DA	C-PR	C-PR		
		Wavelength characterization from spectral calibration	OL_1_SPC__	P0		P			
					C-PR / C-DA	C-PR	C-PR		
	L2	Full Resolution Land and Atmosphere parameters	OL_2_LFR__	P0			P		
					C-PR / C-DA		C-PR	C-DA	
		Reduced Resolution Land and Atmosphere parameters	OL_2_LRR__	P0			P		
					C-PR / C-DA		C-PR		

Payload	Level	Description	Product Type	CSC GS Applicability					
				PR	MPC	LTA	DA	EUM	POD
SLSTR	L0	SLSTR observation and calibration L0 pre-processed granules	SL_0_SLT__G	P0					
								C-PR	
		Full Resolution ISPs	SL_0_SLT__	P0			P		
					C-PR / C-DA	C-PR	C-PR		
	L1	Brightness temperatures and radiances	SL_1_RBT__	P0			P		
					C-PR / C-DA		C-PR		
	L2	Land Surface Temperature Parameters	SL_2_LST__	P0			P		
					C-PR / C-DA		C-PR	C-DA	
		1 km Fire Radiative Power measurements	SL_2_FRP__	P0			P		
					C-PR / C-DA		C-PR		
SRAL	L0	SRAL observation L0 pre-processed granules	SR_0_SRA__G	P0					
								C-PR	
		ISPs raw data and calibration	SR_0_SRA__ ⁹	P0			P		
					C-PR / C-DA	C-PR	C-PR		
		SRAL Calibration L0 pre-processed granules	SR_0_CAL__G	P0					
								C-PR	
		Calibration Level 0 from SRAL ISPs	SR_0_CAL__	P0			P		
					C-PR / C-DA	C-PR	C-PR		
	L1	Level 1 SRAL calibration parameters	SR_1_CAL__	P0			P		
					C-PR / C-DA	C-PR	C-PR		
			SR_1_LAN_RD	P0					

⁹ Archival of this data at the LTAs is limited to their Near Real Time version

Payload	Level	Description	Product Type	CSC GS Applicability					
				PR	MPC	LTA	DA	EUM	POD
		Echos parameters for LRM and PLRM (resolution 20Hz)			C-PR / C-DA		C-PR		
		Unpacked L0 complex echoes, sorted and calibrated	SR_1_SRA_A_	P0			P		
	L2	1-Hz and 20-Hz Ku and C bands parameters (LRM/SAR/PLRM), waveforms. Over Sea Ice	SR_2_LAN_SI	P0			P		
					C-PR / C-DA		C-PR	C-DA	
		1-Hz and 20-Hz Ku and C bands parameters (LRM/SAR/PLRM), waveforms. Over Land Hydro	SR_2_LAN_HY	P0			P		
					C-PR / C-DA		C-PR	C-DA	
		1-Hz and 20-Hz Ku and C bands parameters (LRM/SAR/PLRM), waveforms. Over Land Ice	SR_2_LAN_LI	P0			P		
					C-PR / C-DA		C-PR	C-DA	
Synergy (OLCI + SLSTR)	L1	Colocation grids between OLCI L1/SLSTR L1 and OLCI Acquisition Reference Grid	SY_1_MISR__	P0			P		
					C-PR / C-DA		C-PR ¹⁰		
Synergy (OLCI + SLSTR)	L2	Surface Reflectances and Aerosol parameters over Land	SY_2_SYN__	P0			P		
					C-PR / C-DA		C-PR	C-DA	
	L2	1 km VEGETATION Like product (~VGT-S10) 10days synthesis surface reflectances and NDVI	SY_2_V10__	P0			P		
					C-PR / C-DA		C-PR	C-DA	
		1 km VEGETATION Like product (~VGT-S1) 1day synthesys surface reflectances and NDVI	SY_2_VG1__	P0			P		
					C-PR / C-DA		C-PR		
		1 km VEGETATION Like product (~VGT-P) - TOA Reflectances (mapped on plate carrè)	SY_2_VGP__	P0			P		
					C-PR / C-DA		C-PR		
			SY_2_VGK__	P0			P		

¹⁰ SY_1_MISR__ products are only distributed to the Expert Users

Payload	Level	Description	Product Type	CSC GS Applicability					
				PR	MPC	LTA	DA	EUM	POD
Telemetry Data		1 km VEGETATION Like product (~VGT-P) - TOA Reflectances (on OLCI Acquisition grid)			C-PR / C-DA		C-PR		
		SYNERGY Global Aerosol parameters	SY_2_AOD___	P0			P		
	L0	HKTM L0 pre-processed granules	TM_0_HKM__G	P0					
		Housekeeping Telemetry Data	TM_0_HKM___		C-PR / C-DA		C-PR		
		HKTM containing Packet store#11 L0 pre-processed granules	TM_0_HKM2_G	P0					
		Housekeeping Telemetry Data	TM_0_HKM2___		C-PR	C-PR			
		NAVATT L0 pre-processed granules	TM_0_NAT__G	P0					
		Housekeeping Telemetry Data	TM_0_NAT___		C-PR	C-PR	C-PR		C-PR

4.2. Sentinel-3 Auxiliary Data

Product Type	Description	CSC GS Applicability								
		EXT Provider	EUM	ADG	POD	RS	PR	LTA	DA	MPC
AUX_MOEORB	Medium Orbit Ephemerides (MOE) Orbit file				P0				P	
									C-POD	
AUX_POEORB	Precise Orbit Ephemerides (POE) Orbit file				P0				P	
									C-POD	
AUX_PRCPTF	Precise Platform Data for Sentinel-3				P0				P	
									C-POD	
AUX_GNSSRD	Daily GNSS L1b RINEX files				P0				P	
									C-POD	

Product Type	Description	CSC GS Applicability								
		EXT Provider	EUM	ADG	POD	RS	PR	LTA	DA	MPC
AUX_PROQUA	Processed Quaternions Files				P0				P	
									C- POD	
AUX_COMB	Combined Orbit Products for accurate orbit solution				P0					
									C- POD	
AX__MF1_AX	ECMWF Meteorological Data (Forecast) FC SFC and FC PL in GRIB1 format		P0	P				P	P	
				C-EUM			C-ADG	C-ADG	C- ADG	C- ADG
AX__MFA_AX	ECMWF meteo forecast data in GRIB1 format complementary to analysis data - FC SFC parameter		P0	P				P	P	
				C-EUM			C-ADG	C-ADG	C- ADG	C- ADG
AX__MA1_AX	ECMWF Meteorological Data (Analysis) AN SFC + PL in GRIB1 format		P0	P				P	P	
				C-EUM			C-ADG	C-ADG	C- ADG	C- ADG
AX__MF2_AX	ECMWF Meteorological Data (Forecast) FC ML in GRIB2 format		P0	P				P	P	
				C-EUM			C-ADG	C-ADG	C- ADG	C- ADG
AX__MA2_AX	ECMWF Meteorological Data (Analysis) AN ML in GRIB2 format		P0	P				P	P	
				C-EUM			C-ADG	C-ADG	C- ADG	C- ADG
AX__OSF_AX ¹¹	Reference Orbit Scenario File		P0	P				P		
				C-EUM			C-ADG	C-ADG		C- ADG
AX__FPO_AX	FOS Orbit File (Predicted)		P0	P				P		
				C-EUM			C-ADG	C-ADG		C- ADG
AX__FRO_AX			P0	P				P		

¹¹ This auxiliary data file is also sent to the SRA (part of MP)

Product Type	Description	CSC GS Applicability								
		EXT Provider	EUM	ADG	POD	RS	PR	LTA	DA	MPC
	FOS Orbit File (Restituted)			C-EUM			C-ADG	C-ADG		C-ADG
AX__DEM_AX	Digital Elevation Model (GETASSE30V2, 288 files)					P0				
							C-RS			
AX__LWM_AX	Land/Water Mask file					P0				
							C-RS			
AX__OOM_AX	Open Ocean Mask file					P0				
							C-RS			
AX__CLM_AX	Coastline Mask file					P0				
							C-RS			
AX__TRM_AX	Tidal Regions Mask file					P0				
							C-RS			
AX__CST_AX	Universal Constants File					P0				
							C-RS			
SR__CHD{N,R}AX	SRAL instrumental characterization data (Nominal, Redundant)					P0				
							C-RS			
SR_1_CONMAX	SRAL Configuration Data File - L1 processor					P0				
							C-RS			
SR_1_CONCAX	SRAL Configuration Data File - L1 CAL processor					P0				
							C-RS			
SR_2_CON_AX	SRAL Configuration Data File - L2 processor					P0				
							C-RS			
SR__LSM_AX	SRAL Land/Sea Mask					P0				
							C-RS			
SR_2_IC[01..10]AX	SRAL Modelled instrumental corrections (10 files)					P0				
							C-RS			
SR_2_EOT{1,2}AX	SRAL Coefficients map for the diurnal and semi-diurnal elastic ocean tide calculation					P0				
							C-RS			
SR_2_LT{1,2}_AX						P0				

Product Type	Description	CSC GS Applicability								
		EXT Provider	EUM	ADG	POD	RS	PR	LTA	DA	MPC
	SRAL Coefficients map for the tidal loading effect calculation						C-RS			
SR_2_LNEQAX	SRAL Coefficients map for long period ocean tide calculation					P0				
							C-RS			
SR_2_GEO_AX	SRAL Geoid height map					P0				
							C-RS			
SR_2_MSS1AX	SRAL Mean sea surface height map (solution 1)					P0				
							C-RS			
SR_2_MSS2AX	SRAL Mean sea surface height map (solution 2)					P0				
							C-RS			
SR_2_ODLEAX	SRAL Bathymetry/topography map					P0				
							C-RS			
SR_2_POT_AX	SRAL Polar tide harmonic coefficients					P0				
							C-RS			
SR_2_WNDLAX	SRAL Wind table LRM mode					P0				
							C-RS			
SR_2_WNDSAX	SRAL Wind table SAR mode					P0				
							C-RS			
SR_2_SIGLAX	SRAL Expected Ku-band Sigma0 table (LRM)					P0				
							C-RS			
SR_2_SIGSAX	SRAL Expected Ku-band Sigma0 table (SAR)					P0				
							C-RS			
SR_2_SET_AX	SRAL Cartwright and Edden tide potential amplitudes for the solid earth tide and the equilibrium long period ocean tide height calculation					P0				
							C-RS			
SR_2_SSM_AX	Surface slopes models					P0				
							C-RS			
SR_2_MSMGAX						P0				

Product Type	Description	CSC GS Applicability								
		EXT Provider	EUM	ADG	POD	RS	PR	LTA	DA	MPC
	SRAL Map of the slopes of the MSS/geoid with respect to the ellipsoid						C-RS			
SR_2_CP{00,06,12,18}AX	SRAL Climatological pressure grids (4 files)					P0				
							C-RS			
SR_2_S{1,2}AMAX	SRAL S1 and S2 tide grids of monthly means of global amplitude (2 files)					P0				
							C-RS			
SR_2_S{1,2}PHAX	SRAL S1 and S2 tide grids of monthly means of global phase (2 files)					P0				
							C-RS			
SR_2_MDT_AX	SRAL Mean Dynamic Topography height map					P0				
							C-RS			
SR_2_SHD_AX	SRAL Theoretical distance to shore					P0				
							C-RS			
SR_2_SSBLAX	SRAL SSB correction table (LRM)					P0				
							C-RS			
SR_2_SSBSAX	SRAL SSB correction table (SAR)					P0				
							C-RS			
SR_2_SD[01..12]AX	SRAL Snow depth climatology (12 files containing griDAed snow depth: one for each calendar month of the year)					P0				
							C-RS			
SR_2_SI[01..12]AX	SRAL Sea-ice concentration climatology (12 files, monthly medium ice concentration)					P0				
							C-RS			
SR_2_SST_AX						P0				

Product Type	Description	CSC GS Applicability								
		EXT Provider	EUM	ADG	POD	RS	PR	LTA	DA	MPC
	SRAL Sea surface temperature seasonal tables						C-RS			
SR_2_LRC_AX	SRAL Lapse rate climatology table					P0				
							C-RS			
SR_2_SFL_AX	SRAL Seasonal freezing level table					P0				
							C-RS			
SR_2_FLT_AX	SRAL Freezing level table					P0				
							C-RS			
SR_2_RRC_AX	SRAL Rain rate correction table					P0				
							C-RS			
SR_2_CCT_AX	SRAL Coastal configuration type					P0				
							C-RS			
SR_2_SURFAX	SRAL Surface classification mask					P0				
							C-RS			
SR_2_RET_AX	SRAL Default stack weights					P0				
							C-RS			
SR_2_MLM_AX	SRAL Marine/Land Mask					P0				
							C-RS			
SR_2_MAG_AX	SRAL Meteo Altimeter Gaussian Grid					P0				
							C-RS			
SR_2_LUTFAX	Look-up Table for the f0 function (SAMOSA retracking)					P0				
							C-RS			
SR_2_LUTEAX	Look-up Table for the Epoch parameter (SAMOSA retracking)					P0				
							C-RS			
SR_2_LUTSAX	Look-up Table for the SWH parameter (SAMOSA retracking)					P0				
							C-RS			
SR__ROE_AX	NRT Restituted Orbit File (GNSS Rapid Ephemerides)				P0					
							C-POD		C-POD	

Product Type	Description	CSC GS Applicability								
		EXT Provider	EUM	ADG	POD	RS	PR	LTA	DA	MPC
SR_1_CA{1L,1S,2K,2C}AX	SRAL Internal calibration Long Term Monitoring parameters (4 files): • CAL1_LRM_LTM • CAL1_SAR_LTM • CAL2_Ku_LTM • CAL2_C_LTM						P0	P	P	
								C-PR	C-PR	
MW_1_{NIR,DNB,MON}_AX	MWR Internal calibration and Monitoring Long Term Monitoring parameters (3 files): • MWR_CAL_NIR_LTM • MWR_CAL_DNB_LTM • MWR_MON_LTM						P0	P	P	
								C-PR	C-PR	
SL_1_VSC_AX	SLSTR VISCAL Data file						P0	P	P	
								C-PR	C-PR	C-PR
SR___MGNPAX	Medium Orbit Ephemerides (MOE) Orbit File from POD		P0	P				P	P	
				CEUM			C- ADG	C- ADG	C- ADG	C- ADG
SR___POEPAX	Precise Orbit Ephemerides (POE) Orbit File from POD		P0	P				P	P	
				C-EUM			C- ADG	C-ADG	C- ADG	C- ADG
SR_2_PMPPAX	Preliminary Platform Files from POD		P0	P				P	P	
				C-EUM			C- ADG	C-ADG	C- ADG	C- ADG
SR_2_PCPPAX	Precise Platform Files from POD		P0	P				P	P	
				C-EUM			C- ADG	C-ADG	C- ADG	C- ADG
SR___MDO_AX	Operational Preliminary Orbit Files STC (computed with DORIS and laser data) from SALP		P0	P	P			P	P	
				C-EUM	C-EUM		C- ADG	C-ADG	C- POD	C- ADG
			P0	P	P			P	P	

Product Type	Description	CSC GS Applicability								
		EXT Provider	EUM	ADG	POD	RS	PR	LTA	DA	MPC
SR__POESAX ¹²	NTC Precise orbit file (computed with DORIS, GNSS and laser data) from SALP			C-EUM	C-EUM		C-ADG	C-ADG	C-POD	C-ADG
SR_2_PMPSAX	Preliminary Platform files (from SALP)		P0	P				P	P	
				C-EUM			C-ADG	C-ADG	C-ADG	C-ADG
SR_2_RMO_AX	SRAL Preliminary Ocean barotropic correction (MOG2D data)) from SALP		P0	P				P	P	
				C-EUM			C-ADG	C-ADG	C-ADG	C-ADG
SR_2_PMO_AX	SRAL Precise Ocean barotropic correction (MOG2D data)) from SALP		P0	P				P	P	
				C-EUM			C-ADG	C-ADG	C-ADG	C-ADG
SR_2_POL_AX	SRAL Pole location) from SALP		P0	P				P	P	
				C-EUM			C-ADG	C-ADG	C-ADG	C-ADG
SR_2_PGI_AX	SRAL Along-track ionospheric data (GIM) (for NRT processing)) from SALP		P0	P				P	P	
				C-EUM			C-ADG	C-ADG	C-ADG	C-ADG
SR_2_RGI_AX	SRAL Along-track ionospheric data (GIM) (for STC and NTC Processing) from SALP		P0	P				P	P	
				C-EUM			C-ADG	C-ADG	C-ADG	C-ADG
SR_1_USO_AX	USO frequency from SALP		P0	P				P	P	
				C-EUM			C-ADG	C-ADG	C-ADG	C-ADG
SR__MGNSAX	STC Expertise Preliminary orbit file (computed with GNSS data) from SALP		P0	P				P	P	
				C-EUM			C-ADG	C-ADG	C-ADG	C-ADG
SR_2_SIC{N,S}AX SR_2_SIF{N,S}AX	SRAL Sea-ice concentration. Nominal and fastrack versions respectively.	P0 (OSI-SAF)		P				P	P	
				C-OSI_SAF			C-ADG	C-ADG	C-ADG	C-ADG

¹² SR__POESAX (from EUM) is the same product type as SR__POE_AX (from POD)

Product Type	Description	CSC GS Applicability								
		EXT Provider	EUM	ADG	POD	RS	PR	LTA	DA	MPC
SR_2_ICT{N,S}AX	SRAL Sea-Ice Type	P0 (OSI-SAF)		P				P	P	
				C- OSI_SAF			C-ADG	C-ADG	C- ADG	C- ADG
MW_1_SLC_AX	MWR Side Lobe correction file					P0				
							C-RS			
MW___CHDNAX MW___CHDRAX	MWR instrumental characterization and calibration data (2 files): •nominal path •redundant path					P0				
							C-RS			
MW___STD_AX	MWR Satellite Temperature data file					P0				
							C-RS			
OL_1_EO_AX	OLC L1 Processing Control Parameter file in EO mode					P0				
							C-RS			
OL_1_RAC_AX	OLC L1 Processing Control Parameter file in RC mode					P0				
							C-RS			
OL_1_SPC_AX	OLC L1 Processing Control Parameter file in SC mode					P0				
							C-RS			
OL_1_CLUTAX	OLCI Classification thresholds LUTs file					P0				
							C-RS			
OL_1_INS_AX	OLCI Characterisation and Models Data file					P0				
							C-RS			
OL_1_CAL_AX	OLCI Calibration Data file					P0				
							C-RS			
OL_1_PRG_AX	OLCI Programming Data file					P0				
							C-RS			
OL_2_PCP_AX	OLCI L2 Processing Control Parameters file					P0				
							C-RS			
OL_2_PPP_AX	OLCI Pre Processing data file					P0				
							C-RS			
OL_2_CLP_AX						P0				

Product Type	Description	CSC GS Applicability								
		EXT Provider	EUM	ADG	POD	RS	PR	LTA	DA	MPC
	OLCI Climatology Data file						C-RS			
OL_2_WVP_AX	OLCI Water Vapour Parameters data file					P0				
							C-RS			
OL_2_ACP_AX	OLCI Atmospheric Correction Parameters file					P0				
							C-RS			
OL_2_OCP_AX	OLCI Ocean Colour Processing Parameters file					P0				
							C-RS			
OL_2_VGP_AX	OLCI Vegetation Processing Parameters file					P0				
							C-RS			
SL_1_PCP_AX	SLSTR Processing Control Parameter File					P0				
							C-RS			
SL_1_ANC_AX	SLSTR Ancillary data file					P0				
							C-RS			
SL_1_N_S1AX SL_1_N_S2AX SL_1_N_S3AX SL_1_O_S1AX SL_1_O_S2AX SL_1_O_S3AX SL_1_NAS4AX SL_1_NAS5AX SL_1_NAS6AX SL_1_NBS4AX SL_1_NBS5AX SL_1_NBS6AX SL_1_OAS4AX SL_1_OAS5AX SL_1_OAS6AX SL_1_OBS4AX SL_1_OBS5AX SL_1_OBS6AX	SLSTR Visible and shortwave infrared (Visible-SWIR) characterisation data file (18 files)					P0				
SL_1_N_S7AX SL_1_N_S8AX SL_1_N_S9AX SL_1_N_F1AX SL_1_N_F2AX SL_1_O_S7AX SL_1_O_S8AX SL_1_O_S9AX SL_1_O_F1AX SL_1_O_F2AX	SLSTR Thermal infrared (TIR) characterisation data file (10 files)					P0				
							C-RS			

Product Type	Description	CSC GS Applicability								
		EXT Provider	EUM	ADG	POD	RS	PR	LTA	DA	MPC
SL_1_VIC_AX	SLSTR Vicarious Calibration Data File					P0				
							C-RS			
SL_1_GEO_AX	SLSTR Geometry Data file					P0				
							C-RS			
SL_1_GEC_AX	SLSTR Geometric Calibration Data File					P0				
							C-RS			
SL_1_CLO_AX	SLSTR Cloud LUT Data File					P0				
							C-RS			
SL_1_ESSTAX	Maps of the SST Uncertainties for SLSTR L1 Processing					P0				
							C-RS			
SL_2_PCP_AX	SLSTR Processing Control Parameter File					P0				
							C-RS			
SL_2_S6N_AX	SLSTR S6 nadir shortwave infrared noise dataset					P0				
							C-RS			
SL_2_S7N_AX	SLSTR S7 nadir TIR noise dataset					P0				
							C-RS			
SL_2_S8N_AX	SLSTR S8 nadir TIR noise dataset					P0				
							C-RS			
SL_2_S9N_AX	SLSTR S9 nadir TIR noise dataset					P0				
							C-RS			
SL_2_F1N_AX	SLSTR F1 nadir TIR noise dataset					P0				
							C-RS			
SL_2_F2N_AX	SLSTR F2 nadir TIR noise dataset					P0				
							C-RS			
SL_2_S7O_AX	SLSTR S7 oblique TIR noise dataset					P0				
							C-RS			
SL_2_S8O_AX	SLSTR S8 oblique TIR noise dataset					P0				
							C-RS			
SL_2_S9O_AX	SLSTR S9 oblique TIR noise dataset					P0				
							C-RS			
SL_2_N2_CAX	SLSTR N2 SST coefficients file					P0				
							C-RS			
SL_2_N3RCAX						P0				

Product Type	Description	CSC GS Applicability								
		EXT Provider	EUM	ADG	POD	RS	PR	LTA	DA	MPC
	SLSTR N3R SST coefficients file						C-RS			
SL_2_N3_CAX	SLSTR N3 SST coefficients file					P0				
							C-RS			
SL_2_D2_CAX	SLSTR D2 SST coefficients file					P0				
							C-RS			
SL_2_D3_CAX	SLSTR D3 SST coefficients file					P0				
							C-RS			
SL_2_SST_AX	SLSTR L2P SST algorithms data file					P0				
							C-RS			
SL_2_SDI3AX	SLSTR SDI3 Saharan dust index coefficients aux file					P0				
							C-RS			
SL_2_SDI2AX	SLSTR SDI2 Saharan dust index coefficients aux file					P0				
							C-RS			
SL_2_SSESAX	SLSTR L2P SSES data file					P0				
							C-RS			
SL_2_LSTCAX	SLSTR LST coefficients data file					P0				
							C-RS			
SL_2_LSTBAX	SLSTR LST biome data file					P0				
							C-RS			
SL_2_LSTVAX	SLSTR LST vegetation fraction data file					P0				
							C-RS			
SL_2_LSTWAX	SLSTR LST water vapour data file					P0				
							C-RS			
SL_2_LSTEAX	SLSTR LST error data file					P0				
							C-RS			
SL_2_FRPTAX	SLSTR FRP test data file					P0				
							C-RS			
SL_2_SSTAAX	SLSTR L4 SST analysis data file		P0	P						
				C-EUM			C-ADG	C-ADG		C-ADG
SL_2_IMSCAX	SLSTR LST static snow data file. It is a NetCDF file in SEN3 format					P0				
							C-RS			
SL_2_DIMSAX		P0		P				P		

Product Type	Description	CSC GS Applicability								
		EXT Provider	EUM	ADG	POD	RS	PR	LTA	DA	MPC
	SLSTR LST dynamic snow, daily Map file	(NOAA)								
				C-NOAA			C-ADG	C-ADG		C-ADG
SR_2_NRPPAX	S3 Attitude output product				P0					
							C-POD			
OL_1_MCHDAX	OLCI Inter-channel Misregistration Characterization Data File					P0				
							C-RS			
SL_1_MCHDAX	SLSTR Inter- channel Misregistration Characterization Data File					P0				
							C-RS			
SY_1_PCP_AX	SYN L1 Processing control parameter file					P0				
							C-RS			
SY_1_CDIBAX	Map file of the distance to the coast					P0				
							C-RS			
SY_2_PCP_AX	SYN L2 Processing control parameter file					P0				
							C-RS			
SY_2_PCPSAX	SYN L2 VGS Processing control parameter file					P0				
							C-RS			
SY_2_RAD_AX	SYN L2 radiative transfer Simulation dataset					P0				
							C-RS			
SY_2_RADPAX	SYN VGT P radiative Transfer simulation dataset					P0				
							C-RS			
SY_2_SPCPAX	SYN VGT P spectral response function dataset					P0				
							C-RS			
SY_2_RADSAX	SYN VGT S radiative transfer Simulation dataset					P0				
							C-RS			
SY_1_GCPBAX	SYNERGY L1 Processor GCP data base					P0				
							C-RS			
SL_2_ACLMAX	SLSTR L2 NRT Aerosol Climatology Data					P0				
							C-RS			

Product Type	Description	CSC GS Applicability								
		EXT Provider	EUM	ADG	POD	RS	PR	LTA	DA	MPC
SL_2_ART_AX	SLSTR L2 NRT Atmospheric Radiative Transfer LUT Data					P0				
							C-RS			
SL_2_OSR_AX	SLSTR L2 NRT Ocean Surface Reflectance LUT Data					P0				
							C-RS			
SL_2_PCPAAX	SLSTR L2 Processing Control Parameter					P0				
							C-RS			
SY_2_ACLMAX	SYNERGY L2 NRT Aerosol Climatology Data					P0				
							C-RS			
SY_2_ART_AX	SYNERGY L2 NTC Atmospheric Radiative Transfer LUT Data					P0				
							C-RS			
SY_2_LSR_AX	SYNERGY L2 NTC Land Spectral Reflectance LUT Data					P0				
							C-RS			
SY_2_OSR_AX	SYNERGY L2 NTC Ocean Surface Reflectance LUT Data					P0				
							C-RS			
SY_2_PCPAAX	SYNERGY L2 Processing Control Parameter					P0				
							C-RS			
SL_2_CFM_AX	SLSTR L2 Classification Fire Mask					P0				
							C-RS			
SL_2_FXPAAX	SLSTR L2 Fire channel Pixel Area					P0				
							C-RS			
SL_2_PCPFAX	SLSTR L2 Fire Radiative Power Processing Control Parameter					P0				
							C-RS			
SL_2_PLFMAX	SLSTR L2 Potential Land Fire Mask Data					P0				
							C-RS			
SL_2_SXPAAX	SLSTR L2 Thermal channels Pixel Area					P0				
							C-RS			
SL_1_IRE_AX						P0				

Product Type	Description	CSC GS Applicability								
		EXT Provider	EUM	ADG	POD	RS	PR	LTA	DA	MPC
	SLSTR L1 Input Land surface IR emissivity Data						C-RS			
SL_1_LCC_AX	SLSTR L1 Input Land Cloud Coefficient Data					P0				
							C-RS			
SL_1_CDP_AX	SLSTR L1 Conditional Probability LUT - Cloudy conditions Data					P0				
							C-RS			
SL_1_CLP_AX	SLSTR L1 Conditional Probability LUT - Clear conditions Data					P0				
							C-RS			
SL_1_ADJ_AX	SLSTR L1 AVHRR/SLSTR Adjustment Parameters Data					P0				
							C-RS			
SL_1_RTT_AX	SLSTR L1 RTTOV Coefficients Data					P0				
							C-RS			
SY_2_AODCAX	SYN L2 CAMS AOD climatology Data File					P0				
							C-RS			
				C- OSI_SAF			C-ADG	C-ADG	C- ADG	C- ADG
SR_2_OLTCAX	OLTC (Open Loop Tracking Control)					P0				
							C-RS			
SR_2_BMG_AX	Land Ice Surface BMG (Bed Machine Greenland)					P0				
							C-RS			
SR_2_BMA_AX	Land Ice Surface BMA (Bed Machine Antartica)					P0				
							C-RS			
MPL__NPPF_	Nominal Payload Planning File from MP ¹³		P0							
				C-EUM						
MPL_DNPPF			P0							

¹³ For future use by E2E dashboard



Product Type	Description	CSC GS Applicability								
		EXT Provider	EUM	ADG	POD	RS	PR	LTA	DA	MPC
	Delta Nominal Payload Planning File from MP ¹⁴			C-EUM						
REP__SUP__	Satellite Unavailability Reports	P0 (EUM FOS)								
				C-FOS						

¹⁴ For future use by E2E dashboard

5. SENTINEL-5P DATAFLOW CONFIGURATION

In the case of Sentinel-5P it must be noted that interfaces are represented by the current PDGS GS Elements and are not necessarily in line with the interfaces which are applicable to the other Sentinel missions.

5.1. Sentinel-5P Products

Payload	Level	Product Type	CSC GS Applicability			
			MPC	PR	LTA ¹⁵	DA
TROPOMI	L0	L0__ENG_A_		P0	P	
				C-LTA	C-PR	
		L0__ODB_1_		P0	P	
				C-LTA	C-PR	
		L0__ODB_2_		P0	P	
				C-LTA	C-PR	
		L0__ODB_3_		P0	P	
				C-LTA	C-PR	
		L0__ODB_4_		P0	P	
				C-LTA	C-PR	
		L0__ODB_5_		P0	P	
				C-LTA	C-PR	
		L0__ODB_6_		P0	P	
				C-LTA	C-PR	
		L0__ODB_7_		P0	P	
				C-LTA	C-PR	
		L0__ODB_8_		P0	P	
				C-LTA	C-PR	
	L1	L1B_CA_SIR		P0	P	P
			C-DA		C-PR ¹⁶	C-PR
		L1B_CA_UVN		P0	P	P
			C-DA		C-PR ¹³	C-PR
		L1B_ENG_DB		P0	P	P

¹⁵ Concerning L1 and L2 products, only NTC data are archived

¹⁶ Products archived on First LTA only

Payload	Level	Product Type	CSC GS Applicability			
			MPC	PR	LTA ¹⁵	DA
			C-DA		C-PR ¹³	C-PR
		L1B_PQM		P0	P	
			C-DA		C-PR ¹³	
		L1B_IR_SIR		P0	P	P
			C-DA		C-PR ¹³	C-PR
		L1B_IR_UVN		P0	P	P
			C-DA		C-PR ¹³	C-PR
		L1B_RA_BD1		P0	P	P
			C-DA		C-PR ¹³	C-PR
		L1B_RA_BD2		P0	P	P
			C-DA		C-PR ¹³	C-PR
		L1B_RA_BD3		P0	P	P
			C-DA		C-PR ¹³	C-PR
		L1B_RA_BD4		P0	P	P
			C-DA		C-PR ¹³	C-PR
		L1B_RA_BD5		P0	P	P
			C-DA		C-PR ¹³	C-PR
	L2	L1B_RA_BD6		P0	P	P
			C-DA		C-PR ¹³	C-PR
		L1B_RA_BD7		P0	P	P
			C-DA		C-PR ¹³	C-PR
		L1B_RA_BD8		P0	P	P
			C-DA		C-PR ¹³	C-PR
		L2__AER_AI		P0	P	P
			C-DA		C-PR ¹³	C-PR
		L2__AER_LH		P0	P	P
			C-DA		C-PR ¹³	C-PR
		L2__CH4__		P0	P	P
			C-DA		C-PR ¹³	C-PR
		L2__CLOUD_		P0	P	P
			C-DA		C-PR ¹³	C-PR
		L2__CO__		P0	P	P
			C-DA		C-PR ¹³	C-PR
		L2__HCHO__		P0	P	P
			C-DA		C-PR ¹³	C-PR
		L2__NO2__	P0	P	P	P
			C-DA	C-MPC	C-PR ¹³	C-PR
		L2__NP_BD3		P0	P	P
			C-DA		C-PR ¹³	C-PR

Payload	Level	Product Type	CSC GS Applicability			
			MPC	PR	LTA ¹⁵	DA
		L2__NP_BD6		P0	P	P
			C-DA		C-PR ¹³	C-PR
		L2__NP_BD7		P0	P	P
			C-DA		C-PR ¹³	C-PR
		L2__O3__		P0	P	P
			C-DA		C-PR ¹³	C-PR
		L2__O3__PR		P0	P	P
			C-DA		C-PR ¹³	C-PR
		L2__O3_TCL		P0	P	P
			C-DA		C-PR ¹³	C-PR
		L2__SO2__		P0	P	P
			C-DA		C-PR ¹³	C-PR
		L2__FRESCO ¹⁷		P0	P	P
			C-DA		C-PR	C-PR
	Calibration	ICM_CA_SIR		P0		
			C-PR			
		ICM_CA_UVN		P0		
			C-PR			
		ICM_CKDSIR	P0		P	
				C-PR	C-PR	
	VDAF	L2VOAER_AI		P0		
			C-PR			
		L2VOAER_LH		P0		
			C-PR			
		L2VO_CH4__		P0		
			C-PR			
		L2VO_CLOUD_		P0		
			C-PR			
		L2VO_CO__		P0		
			C-PR			
		L2VOHCHO__		P0		
			C-PR			
		L2VONO2__		P0		

¹⁷ L2__FRESCO is produced and disseminated as Level-2 product by the Sentinel-5P PDGS. However, it is handled as Auxiliary data by the DA.

Payload	Level	Product Type	CSC GS Applicability			
			MPC	PR	LTA ¹⁵	DA
			C-PR			
		L2VOO3_TCL		P0		
			C-PR			
		L2VOO3__PR		P0		
			C-PR			
		L2VOO3____		P0		
			C-PR			
		L2VOSO2__		P0		
			C-PR			
	PyCAMA	MPC_AER_AI		P0		
			C-PR			
		MPC_AER_LH		P0		
			C-PR			
		MPC_CH4__		P0		
			C-PR			
		MPC_CLOUD_		P0		
			C-PR			
		MPC_CO____		P0		
			C-PR			
		MPC_FRESCO		P0		
			C-PR			
		MPC_HCHO__		P0		
			C-PR			
		MPC_NO2__		P0		
			C-PR			
		MPC_O3____		P0		
			C-PR			
		MPC_O3__PR		P0		
			C-PR			
		MPC_SO2__		P0		
			C-PR			
		MPC_NP_BD3		P0		
			C-PR			
		MPC_NP_BD6		P0		
			C-PR			
		MPC_NP_BD7		P0		
			C-PR			

5.2. Sentinel-5P Auxiliary Data

Product Type	Description	CSC GS Applicability				
		FOS	MPC	PR	LTA	DA
AUX_BGHCHO	Background correction for HCHO product			P0		
AUX_BGSO2_	Background correction for SO2 product			P0		
AUX_BGO3__	Background correction for O3			P0		
AUX_BGCLD_	Background correction for CLOUD			P0		
AUX_CTMCH4	CTM model field of CH4 for use with CO and offline CH4 retrieval (CO for NRT, and CO and CH4 for OFFL)		P0	P	P	P
				C-MPC	C-PR	C-PR
AUX_CTM_CO	CTM model field of CO for use with CO and offline CH4 retrieval (CO for NRT and CO and CH4 for OFFL)		P0	P	P	P
				C-MPC	C-PR	C-PR
AUX_CTMFCT	CTM model field of NO2, SO2 and HCHO for use with NO2 retrieval		P0	P	P	P
				C-MPC	C-PR	C-PR
AUX_CTMANA	CTM model field of NO2, SO2 and HCHO for use with NO2 retrieval		P0	P	P	P
				C-MPC	C-PR	C-PR
AUX_NISE	CTM model field of NO2, SO2 and HCHO for use with NO2 retrieval, as retrieved from NASA/NISE			P0	P	P
					C-PR	C-PR
AUX_MET_2D	Snow and ice cover, as retrieved from ECMWF			P0	P	P
					C-PR	C-PR
AUX_MET_QP	Retrieved from ECMWF			P0	P	P
					C-PR	C-PR
AUX_MET_TP	Meteorological surface fields (wind, surface pressure, . . .), as retrieved from ECMWF			P0	P	P
					C-PR	C-PR
AUX_IERS_B	This difference between UT1 and UTC is published by IERS in Bulletin B, as retrieved from IERS			P0	P	
					C-PR	
AUX_IERS_C	Leap second information, as retrieved from IERS			P0	P	
					C-PR	
AUX_ISRF	Instrument spectral response function file.		P0	P		
				C-MPC		
AUX_L1_CKD	The in-flight calibration key data product		P0	P	P	

Product Type	Description	CSC GS Applicability				
		FOS	MPC	PR	LTA	DA
				C-MPC	C-PR	
AUX_O3PPWL	LUT for Time-dependent Soft-calibration in Ozone Profile Processor		P0	P	P	
				C-MPC	C-PR	
CFG_L2_CMR	CFI L2 semi-static configuration files		P0	P	P	
				C-MPC	C-PR	
MPL NPIF_	The NPIF is the output of the FOS Mission Planning System in response to the Nominal Baseline Schedule file (NPPF) provided by KNMI	P0				
				C-FOS		
MPL SAF	The Station Availability file contains all PDGS scheduled Sentinel-5p ground station contacts	P0				
				C-FOS		
MPL SPF	The orbital events file is a XML file containing a list of S/C events derived from the S/C orbit history file	P0				
				C-FOS		
MPL_ORBPRES	This file contains the Orbit State Vectors (OSV) predicted by the FOS	P0				
				C-FOS		
MPL_TLEPRE	This file contains the orbit predicted by the FOS, defined as a set of Two Line Elements	P0				
				C-FOS		
VIIRS_CM	VIIRS Cloud Mask, as retrieved from NASA/NPP and used for the L2 processing			P	P	
				C-NPP	C-PR	
VIIRS_L1B_GEO	PGE302a VIIRS L1 Moderate Resolution Geolocation, as retrieved from NASA/NPP and used for the L2 processing			P	P	
				C-NPP	C-PR	
VIIRS_L1B_RR	VIIRS Moderate Resolution Radiance/Reflectance Data Band 7,9,11, as retrieved from NASA/NPP and used for the L2 processing			P	P	
				C-NPP	C-PR	
VIIRS_CP	VIIRS Cloud Phase EDR			P	P	
				C-NPP	C-PR	
VIIRS_DCOMP	VIIRS Daytime Cloud Optical and Microphysical Properties			P	P	

Product Type	Description	CSC GS Applicability				
		FOS	MPC	PR	LTA	DA
				C-NPP	C-PR	
VIIRS_CTH	VIIRS Cloud Top Height EDR			P	P	
				C-NPP	C-PR	

Note : Special consideration for the REP__SUP__ file since the only purpose of this report is not used in the Sentinel-5p global chain except for E2E monitoring. It is generated by the FOS and circulated to the E2E monitoring using the ADGS interface.

6. SENTINEL-6 DATAFLOW CONFIGURATION

6.1. Sentinel-6 Auxiliary Data

Product Type	Description	CSC GS Applicability	
		POD	DA
AX__ROE__AX	NRT Restituted Orbit State Vectors (OSVs) in Earth-fixed reference	P0	P
			C-POD
AUX_GNSSRD	Daily GNSS L1b RINEX files	P0	P
			C-POD
AUX_PROQUA	Processed Quaternions Files	P0	P
			C-POD
AUX_COMB	Combined Orbit Products for accurate orbit solution	P0	
			C-POD
AX__MOED__AX	STC Preliminary orbit state vectors (computed with DORIS and GNSS data)	P0	P
			C-POD
AX__POE__AX	NTC Precise orbit state vectors (computed with DORIS and GNSS data and validated with laser data)	P0	P
			C-POD

7. ANNEX

7.1. Sentinel-1 Updates removing dataflows

Product Type	Description	CSC GS Applicability								
		FOS	MP	ADG	POD	MPC	PR	LTA	DA	Col X-Band
AUX_RESATT ¹⁸	Restituted Attitude auxiliary data containing computed attitude data, based on the processing of raw ones by the POD service and used for near-real-time processing.			P	P0			P	P	
				C-POD			C-ADG	C-ADG	C-ADG	

7.2. Sentinel-2 Updates removing dataflows

No products are removed from the operational baseline up to now.

¹⁸ File type was not generated since the beginning of S1A mission..

7.3. Sentinel-3 Updates removing dataflows

7.3.1. Removed products

Payload	Level	Description	Product Type	CSC GS Applicability					
				PR	MPC	LTA	DA	EUM	POD
SRAL	L1	Echos and calibration parameters for LRM and SAR mode (averaged measurements/resolution 20 Hz)	SR_1_SRA___ ¹⁴	P0			P		
					C-PR / C-DA		C-PR		
		Geo-located, calibrated azimuth formed complex (I and Q) echoes after slant/Doppler range correction.	SR_1_SRA_BS ¹⁹	P0			P		
					C-PR / C-DA		C-PR		
	L2	1-Hz and 20-Hz Ku and C bands parameters (LRM/SAR), waveforms. Over Land	SR_2_LAN___ ²⁰	P0			P		
					C-PR / C-DA		C-PR	C-DA	

7.3.2. Removed auxiliary data

Product Type	Description	CSC GS Applicability								
		EXT Provider	EUM	ADG	POD	RS	PR	LTA	DA	MPC
SR_2_SIC_AX ²¹	SRAL Sea-ice concentration		P0	P						
				C-EUM			C-ADG	C-ADG		
SR_2_SITNAX	OSISAF Sea Ice Type (Sea Type Concentration)	P0 (OSI-SAF)		P				P	P	
				C-OSI_SAF			C-ADG	C-ADG	C-ADG	C-ADG
SR_2_SITSAX	OSISAF Sea Ice Type	P0 (OSI-SAF)		P				P	P	
				C-OSI_SAF			C-ADG	C-ADG	C-ADG	C-ADG

¹⁹ This Product Type is no longer part of the operational baseline since September 2023

²⁰ This Product Type is no longer of the operational baseline since September 2023

²¹ This auxiliary data is no longer part of the baseline since September 2022.

7.4. Sentinel-5p Updates removing dataflows

7.4.1. Removed products

Payload	Level	Product Type	CSC GS Applicability			
			MPC	PR	LTA ²²	DA
TROPOMI	L0	L0__PDQ__ ²³		P0	P	P
					C-PR	C-PR / C-LTA
		L0__DLQ__ ¹⁸		P0	P	P
					C-PR	C-PR / C-LTA
	L1	L1B_PQM ²⁴		P0	P	
			C-DA		C-PR	
	L2	L2__O3_TPR ²⁵				
	VDAF	L2VONP_BD3 ¹⁹		P0		
			C-PR			
		L2VONP_BD6 ¹⁹		P0		
			C-PR			
		L2VONP_BD7 ¹⁹		P0		
			C-PR			
	PyCAMA	MPC_O3_TCL ¹⁸				
		MPC_O3_TPR ²⁰				

7.4.2. Removed Auxiliary data

Product Type	Description	CSC GS Applicability				
		FOS	MPC	PR	LTA	DA
AUX_O3_M	O3 profile shape climatology		P0	P	P	

²² Concerning L1 and L2 products, only NTC data are archived

²³ Historical product no longer produced

²⁴ No longer needed, now VIIRS that are already validated at the source, are used.

²⁵ Not within the operational baseline



Product Type	Description	CSC GS Applicability				
		FOS	MPC	PR	LTA	DA
				C-MPC	C-PR	