 

RRPP-TN-0004-CS

COPERNICUS - REPROCESSING REFERENCE PACKAGE PREPARATION

Configuration Baseline User Manual

For Sentinel-2-MSI

18 May 2022

Document Change Record

|  |  |  |
| --- | --- | --- |
| Version | Date | Changes |
| Version 1 | 30 November 2020 | Sentinel-2 preliminary version |
| Version 1.1 | 20 January 2021 | Baseline Table is completed |
| Version 2 | 02 April 2021 | Several corrections |
| Version 2.1 | 11 June 2021 | GIPP types out of scope |
| Version 2.2 | 27 July 2021 | CAMSAN and CAMSRE added |
| Version 3.0 | 28 January 2022 | Baseline Table is updated with new GIPP files |
| Version 3.1 | 18 May 2022 | Few new GIPP files |

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Reference Documents for Sentinel-2

Sentinel-2 Product Unit Definition and Metadata ICD\_v1.3.pdf

Sentinel-2-Products-Specification-Document.pdf

[CCDD-IPF]S2-PDGS-BP-IPF-CCDD [11] - IPF DDD.pdf

[CCDD-PS] S2-PDGS-TAS-DI-CCDD-PS [18] - Production DDD.pdf

[CCDD-PS]S2-PDGS-TAS-DI-CCDD-PS [21].pdf

[CCTS-IPF] S2-PDGS-TAS-DI-BPDP-CCTS-IPF [11] - IPF TS.pdf

[CCTS-PS]S2-PDGS-TAS-DI-CCTS-PS [09] - Production TS.pdf

[CICD-ADP] S2-PDGS-TAS-DI-ICD-ADP [08] - Aux ICD.pdf

[CICD-IPF] S2-PDGS-TAS-DI-BPDP-ICD-IPF [15] - IDP-OLQC ICD.pdf

[ICD-PS]S2-PDGS-TAS-DI-ICD-PS [15] - Production ICD.pdf

[ICD-PS]S2-PDGS-TAS-DI-ICD-PS [16].pdf

[L2A-SRN]S2-PDGS-MPC-L2A-SRN-V2.8.0\_V01.pdf

[L2A-SUM]S2-PDGS-MPC-L2A-SUM-V2.8.0\_V01.pdf

[S2-PSD]S2-PDGS-TAS-DI-PSD.pdf

[SUM-DPC]S2-PDGS-TAS-DI-SUM-MOP-PS [14] - DPC Manual.pdf

[SUM-IPF] S2-PDGS-BP-IPF-CCSUM [17] IPF Manual.pdf

Applicable Documents

[AD-01] RRPP-API-0001-CS Reprocessing-Configuration-Baseline-API ICD

# Context and Scope

The Reprocessing Reference Package allows the preparation of the future Sentinel-1/2/3 reprocessing activities by ensuring that all information required to reprocess past instrumental data is available and ready to use in the frame of a reprocessing operational service.

The Reprocessing Preparation Package is composed of :

* a summary Reprocessing Configuration Baseline and an API to query the Reprocessing Configuration Baseline based on the mission satellite unit, sensing time, IPF version to be used, product level and type to be generated,
* an interface delivery point on a cloud environment providing access to all auxiliary files required for the reprocessing operation,
* a detailed Reprocessing Data Baseline and an API to retrieve the auxiliary files to be used for a given time period.

The processing chains of Level-1&2 products use a set of auxiliary files to ensure that the generated products meet the quality and calibration/validation specifications.

The auxiliary files used in a reprocessing operation include typically:

* Static auxiliary files, which are not instrument or time dependent. They may be updated rarely in case a new version becomes available.
* Processor auxiliary files, which are generated by the Copernicus/ESA Ground Segment. They are linked to a specific instrument configuration or to an enhanced set of calibration and/or validation information. They are updated on a case by case basis.
* External auxiliary files, which are generated based on information retrieved from external sources, e.g. from meteo centres. These files are updated frequently, up to several times per day.

The reprocessing operation is performed with an upgraded version of the data processor and a corresponding set of auxiliary files.

# Presentation of the Reprocessing Configuration Baseline Reference and User Guide

This document is the User Manual of the Reprocessing Configuration Baseline for Sentinel-2 MSI.

It gives information on the content of the Reprocessing Configuration Baseline, how it is implemented and how it should be used.

It provides the necessary definition and information for the preparation of any reprocessing campaign using the last IPF version available today.

The generic table in annex (called “All\_ADF”) provides the list of all types of auxiliary files needed for the Sentinel missions. For each type, the table provides the unit dependency (yes or no), the selection rule (number referring to the Rule Table in the next chapter) for the processing task, the usage (in processor level 0 or 1 or 2) and the variability (static of dynamic). A static type is rarely updated while a dynamic type is often updated. The selection rules for the auxiliary files depend on the data processor task.

Then a Reprocessing Configuration Baseline table provides the list of exact auxiliary files to be used with the last processor applicable version with their application time, for each sentinel unit.

This table is made of the following columns:

* The satellite unit: A or B
* The application period: period of sensing time where the given auxiliary files are applicable
* The product level and type: the product type which can be generated using the given auxiliary files
* The processor (IPF) version considered for this table
* The auxiliary type and the auxiliary file name which is applicable

It takes into account any changes in time affecting the instrument configuration or on-board calibration, the potential enhancements in the auxiliary files, the potential changes related to the processor evolutions, etc, in order to ensure the ingestion of the applicable auxiliary files for the last operational IPF version.

The Application Programming Interface (API) allows the query and retrieval of the corresponding list of auxiliary files given a mission satellite unit, sensing time period and product level and type to be generated.

The API access is protected and uses an authorization protocol with generic mail address.

The users connect to the API according to [AD-1].

The main focus is on the set of the auxiliary data files for Sentinel-2 mission.

The general reprocessing rules agreed with ESA are the following ones:

* CAL data must correspond to the real instrument configuration and calibration status at the considered sensing time.
* IERS data must be as close as possible to the considered sensing time (less than one week before).
* ECMWF data should come from the same reanalysis version for all the reprocessing coherency (no forecast needed).
* The DEM is the responsibility of the Reprocessing Contract, so out of the scope of this activity. It is static and installed within the IPF.
* Processing parameters should be the best ones and the same version for all the reprocessing coherency.
* HKTM data should be the last version correcting any previous temporary anomalies or data gaps.
* Sentinel-2 orbit data from the Copernicus POD service are not used.
* Black orbits should be listed and not reprocessed because these orbits suffered from anomalies in raw data which are impossible to correct.

The following auxiliary types are out of scope:

|  |  |
| --- | --- |
| AUX\_GRIXXX\_ | The GRI is included in the IPF SW, as the DEM and the geoid. |
| PRD\_HKTM\_\_\_ | The PRD\_HKTM are provided with the L0 data. |
| AUX\_SADATA | The AUX\_SADATA are provided with the L0 data. |
| AUX\_SXXYYY | The AUX\_SXXYYY are included in the AUX\_SADATA. |
| AUX\_GPS\_\_\_ | The AUX\_GPS is listed in section 5.2.3.1 of S2-PDGS-TAS-DI-BPDP-ICD-IPF v15, but it is probably a mistake, as this AUX\_GPS file never existed. |
| GIP\_R2DEBA | Unused by PDGS |
| GIP\_R2MACO | Unused by PDGS |
| GIP\_L2ACFG | Unused by PDGS |

Some GIPP files should be unit-independent (as specified in S2 PDGS documentation) but in fact, they are found different for S2A and S2B :

GIP\_TILPAR, GIP\_ECMWFP, GIP\_JP2KPA, GIP\_OLQCPA, GIP\_PROBAS

The last available IPF versions are provided in the following table:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| mission | instrument | level 1/2 | release date | IPF version | Baseline ID |
| S2 | MSI | L1 | 02/02/2022 | ??? | 04.00 |
| S2 | MSI | L2 | 02/02/2022 | ??? | 04.00 |

These processing versions are considered as the applicable baselines for this activity.

Any new IPF version official release triggers a new version of this User Manual.

The Configuration Baseline Table is provided on the following page.

(B00: no spectral band dependency; BXX: one file for each spectral band)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Unit** | **Application Period** | **Product Type** | **Auxiliary Type** | **Auxiliary file to be used** |
| A | 20150622T000000-20150818T143000 | L1A/B/C | R2DEPI | S2A\_OPER\_GIP\_R2DEPI\_MPC\_\_20210608T000016\_V20150622T000000\_20151013T134200\_B00 |
| A | L1A/B/C | R2EOB2 | S2A\_OPER\_GIP\_R2EOB2\_MPC\_\_20210608T000016\_V20150622T000000\_20150818T143000\_BXX |
| A | L1A/B/C | R2SWIR | S2A\_OPER\_GIP\_R2SWIR\_MPC\_\_20210608T000001\_V20150622T000000\_20150819T112600\_B00 |
| A | L1A/B/C | SPAMOD | GetReproBaselineListForPeriod(Mission=’S2MSI’, Unit=’A’, SensingTimeStart=’2015-06-22T00:00:00.000Z’, SensingTimeStop=’2015-08-18T14:30:00.000Z’, ProductType=‘L1C’, Variability=’Dynamic’) |
| A | L1A/B/C | R2ABCA | GetReproBaselineListForPeriod(Mission=’S2MSI’, Unit=’A’, SensingTimeStart=’2015-06-22T00:00:00.000Z’, SensingTimeStop=’2015-08-18T14:30:00.000Z’, ProductType=‘L1C’, Variability=’Dynamic’) |
| A | L1A/B/C | R2EQOG | GetReproBaselineListForPeriod(Mission=’S2MSI’, Unit=’A’, SensingTimeStart=’2015-06-22T00:00:00.000Z’, SensingTimeStop=’2015-08-18T14:30:00.000Z’, ProductType=‘L1C’, Variability=’Dynamic’) |
| A | L1A/B/C | AUX\_ECMWFD | GetReproBaselineListForPeriod(Mission=’S2MSI’, Unit=’A’, SensingTimeStart=’2015-06-22T00:00:00.000Z’, SensingTimeStop=’2015-08-18T14:30:00.000Z’, ProductType=‘L1C, Variability=’Dynamic’’) |
| A | L1+L2A | AUX\_CAMSRE | GetReproBaselineListForPeriod(Mission=’S2MSI’, Unit=’A’, SensingTimeStart=’2015-06-22T00:00:00.000Z’, SensingTimeStop=’2015-08-18T14:30:00.000Z’, ProductType=‘L1C’, Variability=’Dynamic’) |
| A | L1A/B/C | AUX\_UT1UTC | GetReproBaselineListForPeriod(Mission=’S2MSI’, Unit=’A’, SensingTimeStart=’2015-06-22T00:00:00.000Z’, SensingTimeStop=’2015-08-18T14:30:00.000Z’, ProductType=‘L1C’, Variability=’Dynamic’) |
| A | L1+L2A | \*\*\* | all static files |
| A | 20150818T143000-20150819T112600 | L1A/B/C | R2DEPI | S2A\_OPER\_GIP\_R2DEPI\_MPC\_\_20210608T000016\_V20150622T000000\_20151013T134200\_B00 |
| A | L1A/B/C | R2EOB2 | S2A\_OPER\_GIP\_R2EOB2\_MPC\_\_20210608T000009\_V20150818T143000\_20150903T110752\_BXX |
| A | L1A/B/C | R2SWIR | S2A\_OPER\_GIP\_R2SWIR\_MPC\_\_20210608T000001\_V20150622T000000\_20150819T112600\_B00 |
| A | L1A/B/C | SPAMOD | GetReproBaselineListForPeriod(…) |
| A | L1A/B/C | R2ABCA | GetReproBaselineListForPeriod(…) |
| A | L1A/B/C | R2EQOG | GetReproBaselineListForPeriod(…) |
| A | L1A/B/C | AUX\_ECMWFD | GetReproBaselineListForPeriod(…) |
| A | L1+L2A | AUX\_CAMSRE | GetReproBaselineListForPeriod(…) |
| A | L1A/B/C | AUX\_UT1UTC | GetReproBaselineListForPeriod(…) |
| A | L1+L2A | \*\*\* | all static files |

Etc…

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Unit** | **Application Period** | **Product Type** | **Auxiliary Type** | **Auxiliary file to be used** |
| B | 20170306T000000-20170517T090510 | L1A/B/C | R2SWIR | S2B\_OPER\_GIP\_R2SWIR\_MPC\_\_20210608T000001\_V20150622T000000\_20170517T090510\_B00 |
| B | L1A/B/C | R2DEPI | S2B\_OPER\_GIP\_R2DEPI\_MPC\_\_20210608T000004\_V20150622T000000\_20180221T000000\_B00 |
| B | L1A/B/C | R2EOB2 | S2B\_OPER\_GIP\_R2EOB2\_MPC\_\_20210608T000001\_V20150622T000000\_20170519T142050\_BXX |
| B | L1A/B/C | SPAMOD | GetReproBaselineListForPeriod(Mission=’S2MSI’, Unit=’B’, SensingTimeStart=’2017-03-06T00:00:00.000Z’,  SensingTimeStop=’2017-05-17T00:00:00.000Z’, ProductType=‘L1C’, Variability=’Dynamic’) |
| B | L1A/B/C | R2ABCA | GetReproBaselineListForPeriod(Mission=’S2MSI’, Unit=’B’, SensingTimeStart=’2017-03-06T00:00:00.000Z’,  SensingTimeStop=’2017-05-17T00:00:00.000Z’, ProductType=‘L1C’, Variability=’Dynamic’) |
| B | L1A/B/C | R2EQOG | GetReproBaselineListForPeriod(Mission=’S2MSI’, Unit=’B’, SensingTimeStart=’2017-03-06T00:00:00.000Z’,  SensingTimeStop=’2017-05-17T00:00:00.000Z’, ProductType=‘L1C’, Variability=’Dynamic’) |
| B | L1A/B/C | AUX\_ECMWFD | GetReproBaselineListForPeriod(Mission=’S2MSI’, Unit=’B’, SensingTimeStart=’2017-03-06T00:00:00.000Z’,  SensingTimeStop=’2017-05-17T00:00:00.000Z’, ProductType=‘L1C’, Variability=’Dynamic’) |
| B | L1+L2A | AUX\_CAMSRE | GetReproBaselineListForPeriod(Mission=’S2MSI’, Unit=’B’, SensingTimeStart=’2017-03-06T00:00:00.000Z’,  SensingTimeStop=’2017-05-17T00:00:00.000Z’, ProductType=‘L1C’, Variability=’Dynamic’) |
| B | L1A/B/C | AUX\_UT1UTC | GetReproBaselineListForPeriod(Mission=’S2MSI’, Unit=’B’, SensingTimeStart=’2017-03-06T00:00:00.000Z’,  SensingTimeStop=’2017-03-22T00:00:00.000Z’, ProductType=‘L1C’, Variability=’Dynamic’) |
| B | L1+L2A | \*\*\* | all static files |
| B | 20170517T090510-20170519T142050 | L1A/B/C | R2SWIR | S2B\_OPER\_GIP\_R2SWIR\_MPC\_\_20210608T000003\_V20170517T090510\_21000101T000000\_B00 |
| B | L1A/B/C | R2DEPI | S2B\_OPER\_GIP\_R2DEPI\_MPC\_\_20210608T000004\_V20150622T000000\_20180221T000000\_B00 |
| B | L1A/B/C | R2EOB2 | S2B\_OPER\_GIP\_R2EOB2\_MPC\_\_20210608T000001\_V20150622T000000\_20170519T142050\_BXX |
| B | L1A/B/C | SPAMOD | GetReproBaselineListForPeriod(…) |
| B | L1A/B/C | R2ABCA | GetReproBaselineListForPeriod(…) |
| B | L1A/B/C | R2EQOG | GetReproBaselineListForPeriod(…) |
| B | L1A/B/C | AUX\_ECMWFD | GetReproBaselineListForPeriod(…) |
| B | L1+L2A | AUX\_CAMSRE | GetReproBaselineListForPeriod(…) |
| B | L1A/B/C | AUX\_UT1UTC | GetReproBaselineListForPeriod(…) |
| B | L1+L2A | \*\*\* | all static files |

Etc …….

List of static ADF :

S2A\_OPER\_GIP\_ATMIMA\_MPC\_\_20210608T000002\_V20150622T000000\_21000101T000000\_B00.TGZ

S2B\_OPER\_GIP\_ATMIMA\_MPC\_\_20210608T000001\_V20150622T000000\_21000101T000000\_B00.TGZ

S2A\_OPER\_GIP\_ATMSAD\_MPC\_\_20210608T000005\_V20150622T000000\_21000101T000000\_B00.TGZ

S2B\_OPER\_GIP\_ATMSAD\_MPC\_\_20210608T000003\_V20150622T000000\_21000101T000000\_B00.TGZ

S2A\_OPER\_GIP\_BLINDP\_MPC\_\_20210608T000003\_V20150622T000000\_21000101T000000\_B00.TGZ

S2B\_OPER\_GIP\_BLINDP\_MPC\_\_20210608T000002\_V20150622T000000\_21000101T000000\_B00.TGZ

S2A\_OPER\_GIP\_CLOINV\_MPC\_\_20210609T000005\_V20150622T000000\_21000101T000000\_B00.TGZ

S2B\_OPER\_GIP\_CLOINV\_MPC\_\_20210609T000002\_V20150622T000000\_21000101T000000\_B00.TGZ

S2A\_OPER\_GIP\_CLOPAR\_MPC\_\_20220120T000001\_V20150622T000000\_21000101T000000\_B00.TGZ

S2B\_OPER\_GIP\_CLOPAR\_MPC\_\_20220120T000001\_V20150622T000000\_21000101T000000\_B00.TGZ

S2A\_OPER\_GIP\_CONVER\_MPC\_\_20210608T000000\_V20150622T000000\_21000101T000000\_B00.TGZ

S2B\_OPER\_GIP\_CONVER\_MPC\_\_20210608T000000\_V20150622T000000\_21000101T000000\_B00.TGZ

S2A\_OPER\_GIP\_DATATI\_MPC\_\_20210608T000007\_V20150622T000000\_21000101T000000\_B00.TGZ

S2B\_OPER\_GIP\_DATATI\_MPC\_\_20210608T000003\_V20150622T000000\_21000101T000000\_B00.TGZ

S2A\_OPER\_GIP\_DECOMP\_MPC\_\_20210608T000000\_V20150622T000000\_21000101T000000\_B00.TGZ

S2B\_OPER\_GIP\_DECOMP\_MPC\_\_20210727T000001\_V20150622T000000\_21000101T000000\_B00.TGZ

S2\_\_OPER\_GIP\_EARMOD\_MPC\_\_20210608T000001\_V20150622T000000\_21000101T000000\_B00.TGZ

S2A\_OPER\_GIP\_ECMWFP\_MPC\_\_20210608T000002\_V20150622T000000\_21000101T000000\_B00.TGZ

S2B\_OPER\_GIP\_ECMWFP\_MPC\_\_20210727T000002\_V20150622T000000\_21000101T000000\_B00.TGZ

S2A\_OPER\_GIP\_G2PARA\_MPC\_\_20220328T000025\_V20150622T000000\_21000101T000000\_B00.TGZ

S2B\_OPER\_GIP\_G2PARA\_MPC\_\_20220328T000025\_V20150622T000000\_21000101T000000\_B00.TGZ

S2A\_OPER\_GIP\_G2PARE\_MPC\_\_20150605T094736\_V20150622T000000\_21000101T000000\_B00.TGZ

S2B\_OPER\_GIP\_G2PARE\_MPC\_\_20210610T000001\_V20150622T000000\_21000101T000000\_B00.TGZ

S2A\_OPER\_GIP\_GEOPAR\_MPC\_\_20210608T000003\_V20150622T000000\_21000101T000000\_B00.TGZ

S2B\_OPER\_GIP\_GEOPAR\_MPC\_\_20210608T000001\_V20150622T000000\_21000101T000000\_B00.TGZ

S2A\_OPER\_GIP\_HRTPAR\_MPC\_\_20220328T000000\_V20150622T000000\_21000101T000000\_B00.TGZ

S2B\_OPER\_GIP\_HRTPAR\_MPC\_\_20220328T000000\_V20150622T000000\_21000101T000000\_B00.TGZ

S2A\_OPER\_GIP\_INVLOC\_MPC\_\_20210608T000006\_V20150622T000000\_21000101T000000\_B00.TGZ

S2B\_OPER\_GIP\_INVLOC\_MPC\_\_20210608T000003\_V20150622T000000\_21000101T000000\_B00.TGZ

S2B\_OPER\_GIP\_INTDET\_MPC\_\_20210906T000010\_V20150622T000000\_21000101T000000\_B00.TGZ

S2A\_OPER\_GIP\_INTDET\_MPC\_\_20210906T000010\_V20150622T000000\_21000101T000000\_B00.TGZ

S2A\_OPER\_GIP\_JP2KPA\_MPC\_\_20210713T123700\_V20150622T000000\_21000101T000000\_B00.TGZ

S2B\_OPER\_GIP\_JP2KPA\_MPC\_\_20210713T123700\_V20150622T000000\_21000101T000000\_B00.TGZ

S2A\_OPER\_GIP\_LREXTR\_MPC\_\_20210608T000001\_V20150622T000000\_21000101T000000\_B00.TGZ

S2B\_OPER\_GIP\_LREXTR\_MPC\_\_20210608T000001\_V20150622T000000\_21000101T000000\_B00.TGZ

S2A\_OPER\_GIP\_MASPAR\_MPC\_\_20220120T000009\_V20150622T000000\_21000101T000000\_B00.TGZ

S2B\_OPER\_GIP\_MASPAR\_MPC\_\_20220120T000002\_V20150622T000000\_21000101T000000\_B00.TGZ

S2A\_OPER\_GIP\_OLQCPA\_MPC\_\_20220217T000041\_V20150622T000000\_21000101T000000\_B00.TGZ

S2B\_OPER\_GIP\_OLQCPA\_MPC\_\_20220217T000041\_V20150622T000000\_21000101T000000\_B00.TGZ

S2A\_OPER\_GIP\_PRDLOC\_MPC\_\_20210608T000012\_V20150622T000000\_21000101T000000\_B00.TGZ

S2B\_OPER\_GIP\_PRDLOC\_MPC\_\_20210608T000009\_V20150622T000000\_21000101T000000\_B00.TGZ

S2A\_OPER\_GIP\_PROBAS\_MPC\_\_20220121T000400\_V20150622T000000\_21000101T000000\_B00.TGZ

S2B\_OPER\_GIP\_PROBAS\_MPC\_\_20220121T000400\_V20150622T000000\_21000101T000000\_B00.TGZ

S2A\_OPER\_GIP\_R2BINN\_MPC\_\_20210608T000003\_V20150622T000000\_21000101T000000\_B00.TGZ

S2B\_OPER\_GIP\_R2BINN\_MPC\_\_20210608T000001\_V20150622T000000\_21000101T000000\_B00.TGZ

S2A\_OPER\_GIP\_R2CRCO\_MPC\_\_20210608T000003\_V20150622T000000\_21000101T000000\_B00.TGZ

S2B\_OPER\_GIP\_R2CRCO\_MPC\_\_20220120T000002\_V20150622T000000\_21000101T000000\_B00.TGZ

S2A\_OPER\_GIP\_R2DECT\_MPC\_\_20210608T000003\_V20150622T000000\_21000101T000000\_BXX.TGZ

S2B\_OPER\_GIP\_R2DECT\_MPC\_\_20210608T000001\_V20150622T000000\_21000101T000000\_BXX.TGZ

S2A\_OPER\_GIP\_R2DEFI\_MPC\_\_20210608T000003\_V20150622T000000\_21000101T000000\_BXX.TGZ

S2B\_OPER\_GIP\_R2DEFI\_MPC\_\_20210608T000001\_V20150622T000000\_21000101T000000\_BXX.TGZ

S2A\_OPER\_GIP\_R2DENT\_MPC\_\_20210608T000003\_V20150622T000000\_21000101T000000\_BXX.TGZ

S2B\_OPER\_GIP\_R2DENT\_MPC\_\_20210608T000001\_V20150622T000000\_21000101T000000\_BXX.TGZ

S2A\_OPER\_GIP\_R2L2NC\_MPC\_\_20210608T000003\_V20150622T000000\_21000101T000000\_BXX.TGZ

S2B\_OPER\_GIP\_R2L2NC\_MPC\_\_20210608T000001\_V20150622T000000\_21000101T000000\_BXX.TGZ

S2A\_OPER\_GIP\_R2NOMO\_MPC\_\_20210608T000004\_V20150622T000000\_21000101T000000\_B00.TGZ

S2B\_OPER\_GIP\_R2NOMO\_MPC\_\_20210608T000001\_V20150622T000000\_21000101T000000\_B00.TGZ

S2A\_OPER\_GIP\_R2PARA\_MPC\_\_20220307T000009\_V20150622T000000\_21000101T000000\_B00.TGZ

S2B\_OPER\_GIP\_R2PARA\_MPC\_\_20220307T000009\_V20150622T000000\_21000101T000000\_B00.TGZ

S2A\_OPER\_GIP\_R2WAFI\_MPC\_\_20210608T000003\_V20150622T000000\_21000101T000000\_BXX.TGZ

S2B\_OPER\_GIP\_R2WAFI\_MPC\_\_20210608T000001\_V20150622T000000\_21000101T000000\_BXX.TGZ

S2A\_OPER\_GIP\_RESPAR\_MPC\_\_20210608T000001\_V20150622T000000\_21000101T000000\_B00.TGZ

S2B\_OPER\_GIP\_RESPAR\_MPC\_\_20210608T000001\_V20150622T000000\_21000101T000000\_B00.TGZ

S2A\_OPER\_GIP\_TILPAR\_MPC\_\_20210608T000007\_V20150622T000000\_21000101T000000\_B00.TGZ

S2B\_OPER\_GIP\_TILPAR\_MPC\_\_20210608T000001\_V20150622T000000\_21000101T000000\_B00.TGZ

S2A\_OPER\_GIP\_VIEDIR\_MPC\_\_20210608T000005\_V20150622T000000\_21000101T000000\_BXX.TGZ

S2B\_OPER\_GIP\_VIEDIR\_MPC\_\_20210608T000006\_V20150622T000000\_21000101T000000\_BXX.TGZ

S2\_\_OPER\_GIP\_L2ACAC\_MPC\_\_20220121T000004\_V20150622T000000\_21000101T000000\_B00.TGZ

S2\_\_OPER\_GIP\_L2ACFG\_MPC\_\_20220124T000000\_V20150622T000000\_21000101T000000\_B00.TGZ

S2\_\_OPER\_GIP\_L2ACSC\_MPC\_\_20220121T000003\_V20150622T000000\_21000101T000000\_B00.TGZ

S2\_\_OPER\_GIP\_PROBA2\_MPC\_\_20220121T000400\_V20150622T000000\_21000101T000000\_B00.TGZ

# Annex: All ADF Table

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| --- | --- | --- | --- | --- |
| **Type** | **Origin** | **Static/Dynamic** | **Usage** | **Comment** |
| GIP\_R2MACO | ESA | static | L1 | Maximum signal denoising coefficients (13 files, one per band) |
| GIP\_L2ACSC | ESA | static | L2 | GIPP for IDPSC: L2A Surface Classification (no dependence on satellite unit) |
| GIP\_L2ACAC | ESA | static | L2 | GIPP for IDPSC: L2A Atmospheric Correction (no dependence on satellite unit) |
| GIP\_L2ACFG | ESA | static | L2 | Configuration parameters for L2A processor |
| L2A\_GIPP | ESA | static | L2 | L2A processor user configuration parameters |
| GIP\_PROBA2 | ESA | static | L2 | GIPP for IDPSC: L2A Processing Baseline |
| AUX\_UT1UTC\_ | IERS | dynamic | L1 | International Earth Rotation & Reference Systems service (IERS) data |
| GIP\_ATMIMA\_ | ESA | static | L1 | image telemetry parameters |
| GIP\_ATMSAD\_ | ESA | static | L1 | HKTM parameters |
| GIP\_BLINDP\_ | ESA | static | L1 | list of blind pixels |
| GIP\_EARMOD\_ | ESA | static | L1 | earth model parameters (no dependence on satellite unit) |
| GIP\_CLOINV/PAR\_ | ESA | static | L1 | CLOINV : cloud inversion parameters ; CLOPAR : cloud algorithm parameters |
| GIP\_CONVER\_ | ESA | static | L1 | Mapping parameters from 16 to 18 bits |
| GIP\_DATATI\_ | ESA | static | L1 | datation parameters |
| GIP\_DECOMP\_ | ESA | static | L1 | On-board decompression parameters |
| GIP\_G2PARA\_ | ESA | static | L1 | geometric parameters for IPF L1 processor |
| GIP\_G2PARE\_ | ESA | static | L1 | geometric parameters for IPF L1 refinement |
| GIP\_GEOPAR\_ | ESA | static | L1 | global geometric parameters |
| GIP\_INTDET\_ | ESA | static | L1 | list of interdetector pixels |
| GIP\_INVLOC\_ | ESA | static | L1 | inverse location parameters |
| GIP\_JP2KPA\_ | ESA | static | L1+L2 | JP2000 compression parameters |
| GIP\_LREXTR\_ | ESA | static | L1 | extraction parameters |
| GIP\_MASPAR\_ | ESA | static | L1 | mask parameters |
| GIP\_OLQCPA\_ | ESA | static | L1+L2 | parameters and tests for the On Line Quality Control |
| GIP\_PRDLOC\_ | ESA | static | L1 | product location parameters |
| GIP\_PROBAS\_ | ESA | static | L1 | L1 processing baseline parameters |
| GIP\_R2ABCA\_ | ESA | dynamic | L1 | radiometric absolute calibration coefficients |
| GIP\_R2BINN\_ | ESA | static | L1 | binning parameters for 60m bands |
| GIP\_R2CRCO\_ | ESA | static | L1 | crosstalk correction |
| GIP\_R2DEBA | ESA | static | L1 | decomposition base (13 files, one for each band) |
| GIP\_R2DECT\_ | ESA | static | L1 | deconvolution thresholds (13 files, one for each band) |
| GIP\_R2DEFI\_ | ESA | static | L1 | deconvolution filters (13 files, one for each band) |
| GIP\_R2DENT\_ | ESA | static | L1 | denoising thresholds (13 files, one for each band) |
| GIP\_R2DEPI\_ | ESA | static | L1 | list and status of defective pixels |
| GIP\_R2EOB2\_ | ESA | static | L1 | radiometric equalisation coefficients for on-board processor (13 files, one per band) |
| GIP\_R2EQOG\_ | ESA | dynamic | L1 | radiometric equalisation coefficients for on-ground L1 processor (13 files, one per band) |
| GIP\_R2L2NC\_ | ESA | static | L1 | L2 norm coefficients (13 files, one for each band) |
| GIP\_R2NOMO\_ | ESA | static | L1 | noise model parameters |
| GIP\_R2PARA\_ | ESA | static | L1 | radiometric parameters for IPF L1 |
| GIP\_R2SWIR\_ | ESA | static | L1 | SWIR pixels status |
| GIP\_R2WAFI\_ | ESA | static | L1 | wavelet filters (13 files, one for each band) |
| GIP\_RESPAR\_ | ESA | static | L1 | resampling parameters |
| GIP\_SPAMOD\_ | ESA | dynamic | L1 | platform orientation angles |
| GIP\_TILPAR\_ | ESA | static | L1 | tiling parameters from global map of tiles (no dependence on satellite unit) |
| GIP\_VIEDIR\_ | ESA | static | L1 | viewing directions for each spectral band (13 files) |
| GIP\_ECMWFP\_ | ESA | static | L1 | ECMWF support parameters (no dependence on satellite unit) |
| AUX\_ECMWFD | ECMWF | dynamic | L1 | GRIB data: Total Column Ozone (TCO3), Total Column Water Vapour (TCWV) and Mean Sea Level pressure (MSLP) |
| AUX\_CAMSAN | ECMWF | dynamic | L1+L2 | CAMS AOD data from analysis |
| AUX\_CAMSRE | ECMWF | dynamic | L1+L2 | CAMS AOD data from reanalysis |
| AUX\_ECMWFT | ESA | dynamic | L1 | ECMWF data resampled on the UTM grid in output in L1C product |
| AUX\_RESORB | CPOD | dynamic | L1 | Restituted Orbit from POD service |
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