



**Solar Orbiter RPW Data
Product Description Document**

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SOLAR ORBITER



RPW Ground Segment

Solar Orbiter RPW Data Product Description Document

ROC-PRO-DAT-NTT-00075-LES
Iss.01, Rev.00

Prepared by:	Function:	Signature:	Date
Xavier Bonnin Jan Soucek	RPW Ground Segment Software Manager RPW Instrument Scientist		Dd/mm/yyyy
Verified by:	Function:	Signature:	Date
RPW Team	RPW Ground Segment Software Architect		Dd/mm/yyyy
Approved by:	Function:	Signature:	Date
Milan Maksimovic	RPW PI		Dd/mm/yyyy
For application:	Function:	Signature:	Date
Name	Team Member #4		Dd/mm/yyyy

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CNRS-Observatoire de PARIS
Section de MEUDON – LESIA
5, place Jules Janssen
92195 Meudon Cedex – France



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1 INTRODUCTION

1.1 Purpose and Scope

This Data Product Definition Document (DPDD) describes the format and content of the Radio and Plasma Waves instrument (RPW) Science data. It includes descriptions of the data products and associated metadata, including the data format, content, and generation pipeline. These products will be stored and distributed from the Solar Orbiter Science Archive (SOAR) of the SOC.

The specifications described in this DPDD apply to all RPW Science products submitted to ESA's Solar Orbiter SOC for further archival and exploitation. This document only includes descriptions of Science products delivered by the Science pipelines run at the RPW Team premises. It does not address the Low Latency data (see [RD.05]) since it will be described in [RD.01], [RD.02], [RD.03] and [RD.04].

1.1 Applicable Documents

[AD.01] SOL-SGS-TN-0009 Metadata Definition for Solar Orbiter Science

[AD.02] SOL-SGS-ICD-002 Data Producer to Archive ICD (DPAICD)

1.2 Reference Documents

[RD.01] SOL-SGS-ICD-0004 Solar Orbiter Interface Control Document for Low Latency CDF Files

[RD.02] SOL-SGS-OTH-0002 Dataset Description Document Template for Low Latency CDF Files

[RD.03] SOL-SGS-ICD-0005 Solar Orbiter Interface Control Document for Low Latency FITS Files

[RD.04] SOL-SGS-OTH-0003 Dataset Description Document Template for Low Latency FITS Files

[RD.05] SOL-SGS-TN-0003 Solar Orbiter Low Latency Data: Concept and Implementation

[RD.06] SOL-SGS-PL-0009 Solar Orbiter Archive Plan

[RD.07] SOLO-RPWSY-PT-1235-CNES RPW Instrument Calibration Plan

[RD.08] SOLO-RPW-TN-1989-CNES Calibration test Report

1.1 Abbreviations and Acronyms

SOAR Solar Orbiter Archive



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2 RPW INSTRUMENT DESCRIPTION

High-level description of the instrument and instrument science objectives, with a reference to an external, publicly available instrument document (such as the instrument paper). The proposed structure for this section is indicated below (see sub-sections).

2.1 Science Objective

Describe the instrument science objectives.

RPW will make key measurements in support of the first three, out of four top-level scientific questions, which drive Solar Orbiter overall science objectives:

- How and where do the solar wind plasma and magnetic field originate in the corona?
- How do solar transients drive heliospheric variability?
- How do solar eruptions produce energetic particle radiation that fills the heliosphere?
- How does the solar dynamo work and drive connections between the Sun and the heliosphere?

Here is the summary of the specific RPW Science Objectives.

Solar & Interplanetary Radio Burst

- What is the role of shocks and flares in accelerating particles near the Sun?
- How is the Sun connected magnetically to the interplanetary medium?
- What are the sources and the global dynamics of eruptive events?
- What is the role of ambient medium conditions on particle acceleration and propagation?
- How do variations and structure in the solar wind affect low frequency radio wave propagation?

Electron density & temperature measurements with the Quasi-Thermal Noise spectroscopy

- Precise measurement of both the electron density and temperature, with accuracies respectively of a few % and around 10 %, at perihelion.
- Study the non-thermal character of the electron distributions at perihelion.

Radio emission processes from electron beams: Langmuir waves and electromagnetic mode conversion

- Measurements for the first time in the Solar Wind of both the electric and magnetic field waveforms at high time resolution (up to 500 kSs).
- Study of the mode conversion from Langmuir to electromagnetic waves.
- Study of the energy balance between electron beams, Langmuir waves and e.m. radio waves at several radial distances

Solar wind microphysics and turbulence



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- Measure of the waves associated with the plasma instabilities that are generated by temperature anisotropies in the solar wind.
- First DC/LF electric field measurements in the inner heliosphere and over a large radial distance in the solar.

Shocks, Reconnection, Current Sheets, and Magnetic Holes

- Identification & study of the reconnection process in current sheets with thickness down to the ion scales and smaller.
- Determination of the interplanetary shock structure down to the spatial and temporal scales comparable and smaller than the typical ion scales.
- Determination of different particle energisation mechanisms within shocks and reconnection regions.
- Distinguish different radio burst generation mechanisms.

Interplanetary Dust

- Determination, in combination with the EPD instrument, the spatial distribution, mass and dynamics of dust particles in the near-Sun heliosphere, in and out of the ecliptic.

To cover its specific Science Objectives, RPW will measure magnetic and electric fields at high time resolution using a number of sensors, to determine the characteristics of electromagnetic and electrostatic waves in the solar wind. More precisely, RPW will:

- Make the first-ever high accuracy, high-sensitivity and low noise measurements of electric fields at low frequencies (below ~ 1 kHz) in the inner Heliosphere.
- Measure the magnetic and electric fields of the solar wind turbulence with high sensitivity and dynamic range along the spacecraft trajectory.
- Store high-resolution data from scientifically interesting regions such as in-situ shock crossings, in-situ Type III events and others.
- Measure the satellite potential with high temporal resolution permitting to estimate the density fluctuations in the solar wind and allowing higher accuracy particle instrument measurements.
- Measure the quasi thermal noise and Langmuir waves around the local plasma frequency
- Measure for the first time the high frequency magnetic counterpart of Langmuir waves associated with in-situ Type III bursts
- Observe the solar and interplanetary radio burst
- Observe the radio counterpart of dust particle impacts
- Detect on-board in-situ shock crossings and store the corresponding data
- Detect on-board in-situ Type III events and store the corresponding data



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2.2 Operational Modes

Figure below gives the RPW instrument modes, which are managed by the Data Processing Unit (DPU).

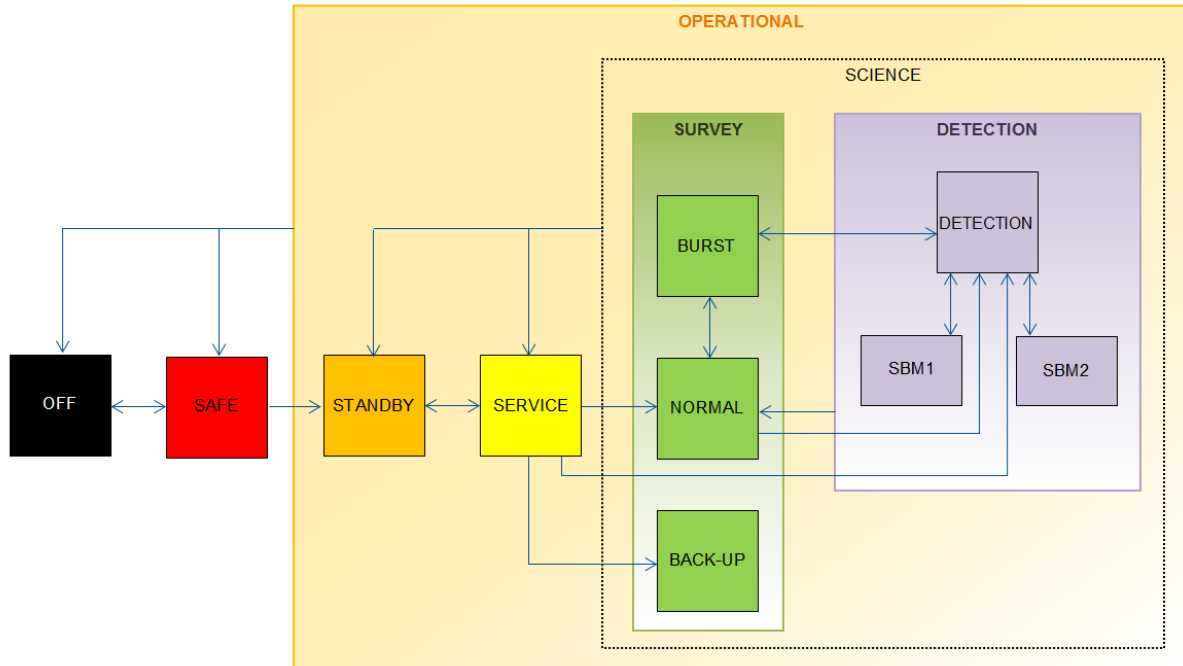


Figure 1. RPW operational modes.

Especially, the DPU shall manage the following modes:

- A SAFE mode: RPW is electrically powered by the spacecraft and initializes its DPU Boot Software (DBS). Only Housekeeping (HK) telemetry (TM) is emitted.
- A STANDBY mode: When the DPU Application Software (DAS) is started by the DBS upon reception of a telecommand (TC), RPW enters in the STANDBY mode. In this mode, only the DPU and the Power Distribution Unit (PDU) are switched on. RPW waits for a TC to go in the SERVICE mode.
- A SERVICE mode: In this mode, RPW switches on all the analyser boards, checks the analyser software integrity before booting them, performs maintenance operations if needed and configures the software and hardware parameters of each analyser. RPW switches ON the Search Coil Magnetometer (SCM) and the Antenna preamplifiers. RPW waits for a TC to go in the science modes
- A SCIENCE mode: where the instrument performs scientific measurements and generates related TM packets, including Low Latency.

In the SCIENCE mode, RPW will have capability to run into basically three different sub-modes:

- A "SURVEY_NORMAL" submode, where the science data acquisition is performed continuously in the normal cadence
- A "SURVEY_BURST" mode, where the science data acquisition is performed continuously in a high cadence



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- A "SBM_DETECTION" mode where, in parallel to the normal cadence data acquisition, in-situ shocks and Langmuir Waves (LW) events are automatically detected and measured at higher cadence, via dedicated "SBM1" and "SBM2" submodes respectively.

The "SURVEY_NORMAL" mode is a nominal cadence mode that will basically run all the time along the orbit, except during time when the "SURVEY_BURST" mode will operate. The "SURVEY_NORMAL" mode is intended to provide all the data for synoptic survey of the plasma conditions in the heliosphere.

The "SURVEY_BURST" mode is a high cadence mode that will be operated by command.

The "SBM_DETECTION" mode will run simultaneously with the normal cadence data flow, and fill internal (circular or no) buffers in order to enable the RPW DPU to perform the selection of in-situ shocks and LW events. The existence of "SBM_DETECTION" mode involves therefore that two data flows, one at "normal" cadence, the other one at higher cadence, are continuously recorded by the sub-systems and transmitted to the DPU.

2.1 Calibration

2.1.1 On-Ground Calibration

Description of the on-ground calibration performed on the instrument, and results. Include references to calibration performance reports.

The instrument on-ground calibration is described in the RPW Instrument Calibration Plan [RD.07].

Results are given in the Calibration test Report [RD.08].

2.1.2 In-flight Calibration

Description of the in-flight calibration, with references to existing document where applicable.

TBW

3 DATA GENERATION AND ANALYSIS PROCESS

The RPW science products are produced by the RPW Instrument Team. The data generation and analysis process is described in this section.

Science data received by the SOC from the RPW team are made available to end users through the Solar Orbiter archive following the policies described in the Archiving Plan [RD.06].

The procedure for delivery of the Science data from the RPW Instrument Team to the SOC must be fully compliant with the IT-SOC Science Data Delivery ICD (TBW) [AD.02].

3.1 Scientific Measurements

To meet the science objectives defined above, the RPW instrument has to consist of a sophisticated plasma/radio wave receiver system connected to high sensitivity electric and magnetic sensors. Since the receiver system covers a very wide frequency range (quasi-DC to 20 MHz for electric, and 0.1 Hz to 500 kHz for magnetic), different kinds of sensors are used for the measurements.



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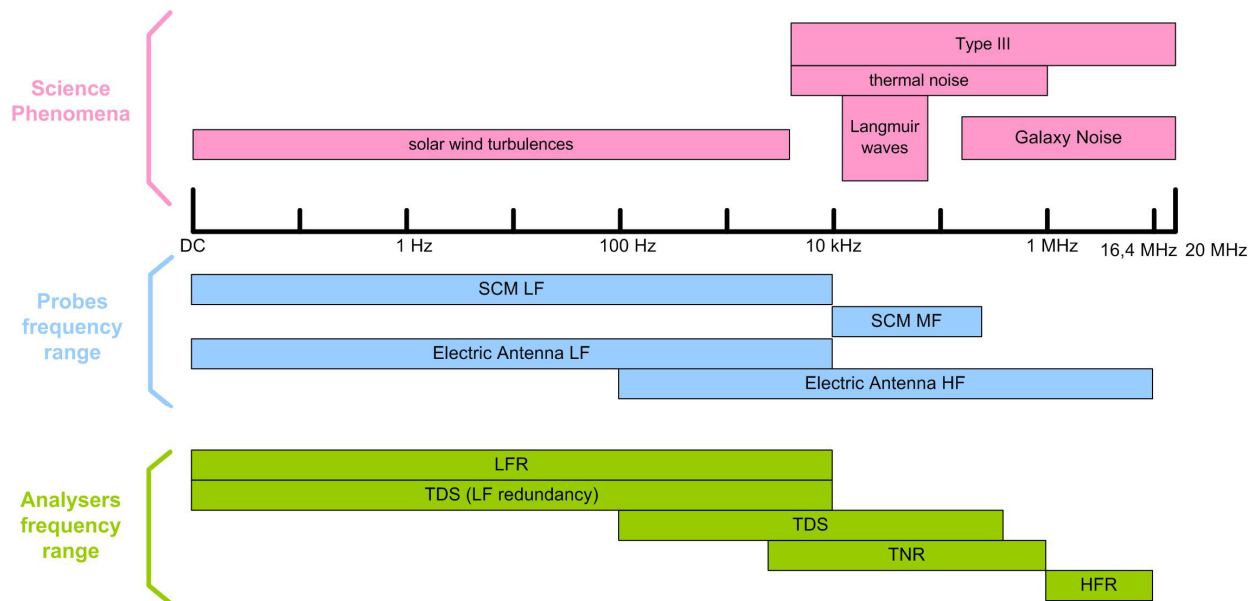


Figure 2. RPW frequency allocation.

The electric antenna (ANT), consisting on a set of three monopoles and the magnetic search coil unit (SCM) are designed to perform correctly for quasi -DC as well as for high frequency measurements. In particular, ANT design is optimised to satisfy the goal of measuring both the quasi-DC/low frequency electric fields and higher frequency radio and thermal noise emissions.

A biasing unit (BIAS) will allow DC electric measurements. The three TDS, LFR and TNR-HFR sub-systems correspond to the core of the receiver system by covering both waveform data and power spectral densities. TDS, LFR and TNR-HFR are connected to a common Data Processing Unit (DPU) that will handle commands, data and communication with S/C.

The science objective of LFR is the study of the electromagnetic wave activity in the extended corona and the solar wind, from a fraction of a Hertz to about 10 kHz, which should cover the electron gyrofrequency and most of the Doppler-shifted frequencies of the low frequency plasma waves. The main waves to be observed in this frequency range are thus kinetic or inertial Alfvén waves, ion cyclotron waves, ion acoustic waves, and magnetosonic or whistler mode waves. Their characterization and the determination of their respective role in heating and accelerating the solar wind during its expansion is the main scientific issue addressed by LFR. Another important subject for LFR is the study of the low frequency plasma waves associated to solar wind disturbances, as for instance interplanetary shocks.

Characterizing the low frequency waves in the solar wind involves the capability of the LFR to distinguish solitary waves from broadband wave activity, to cover turbulence and plasma instabilities, to identify the wave modes at work. Performing a multi-component analysis of the data is thus mandatory, using either a classical Fourier analysis or another treatment of the waveforms more appropriate to turbulence analysis.

Given the limitations in the telemetry, it is necessary to implement specific techniques to take the maximum advantage of the data. The LFR is tailored to optimize the scientific return of the data. The LFR design gives the possibility of mixing different types of output data, from low-level processed data (**waveform data**) to high-level processed data (**averaged spectral matrices and their derived parameters**), with various data rate possibilities (continuous or



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cyclic transmission, adaptable frequency bandwidth as well as adaptable frequency and time resolutions). A number of predefined working modes will be defined, but it will also be possible to define other working modes in flight.

The main scientific objective of TDS is the study of high frequency plasma waves and electric fields oscillations in the solar wind. The most important phenomenon observed in this frequency range are Langmuir waves associated with solar bursts, interplanetary shocks and other solar wind disturbances. These waves play a significant role in solar wind physics, being the source process of the solar radio emissions. The TDS is designed to study the detailed structure and dynamics of the waves and primarily the poorly understood process of conversion of electron beam energy to electromagnetic radiation via Langmuir waves. The target waves appear close (within 20%) to the local plasma frequency and the conversion to electromagnetic waves can occur both at the plasma frequency and at its first harmonic ($2 \cdot f_p$). The waves are typically narrow-band, strongly modulated and appear in bursts lasting from several milliseconds to about one second. Experience from previous experiments (e.g. Cluster, WIND and STEREO) has shown that due to short duration and rich structure, the waves are best studied using broadband waveform data. In particular:

- Multiple field components are required to study wave polarization
- Magnetic field measurements are needed to properly identify the EM radiation process
- Waveform snapshots need to be sufficiently long to capture an entire wave burst.

TDS will be designed to perform **waveform measurements** fulfilling these requirements, offering a range of configurable parameters to tune the instrument to a present region of solar wind and target process. Since the data volume associated with these measurements is enormous and Langmuir wave bursts are relatively rare and short, the on-board logic will attempt to identify snapshots containing potentially interesting measurements and only select these for downlink. Second science objective of the TDS instrument is the study of interplanetary dust by registering voltage spikes measured by spacecraft antenna in response to an impact of a dust particle on the spacecraft. Recent studies have shown that the amplitude and shape of the dust impact can be used to gather information about the size and energy of the impacting particle. Full waveform measurements are in general not necessary for this process. TDS on-board software will scan the data for dust impact signatures and collect **statistics of their parameters**.

TNR-HFR is of prime importance for the RPW science objectives since it provides **electric power spectral densities** from 4 kHz up to 16MHz and **magnetic power spectral densities** from 10 kHz up to 500 kHz. Below is a brief overview of the TNR-HFR science objectives:

The TNR-HFR measures the Quasi-thermal Noise due to the motion of solar wind electrons around the electric antennas. The spectroscopy of this noise will provide electron properties such as their density and temperature. The TNR-HFR measures Langmuir-like waves that are frequently observed in the solar wind in association with supra-thermal electron beams produced by either solar flares or accelerated by interplanetary shocks.

The TNR-HFR measures and tracks the solar radio bursts due to particle acceleration and shock waves in the corona and inner heliosphere. By processing **cross-correlations** between two channels connected to different antennas, the TNR-HFR has direction-finding capabilities for tracking the solar radio bursts. Finally, TNR-HFR is also sensitive to



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dust impacts via the corresponding plasma cloud and pickup signal on the electric field antennas. Actually, TNR-HFR measures, in the spectral domain, the voltage induced when a dust grain impacting the S/C at high velocity is vaporized and ionized, producing a plasma cloud, which is partially recollected by the target.

3.2 Data flow overview

This section will include a top-level description of the data processing workflow.

[Include Block Diagram showing the data sources and the processing steps]

The RPW science data processing is performed by the RPW Operations Centre (ROC), which is located at the Laboratoire d'Etudes Spatiales et d'Instrumentation en Astrophysique (LESIA) in Meudon, France.

Figure below gives the overall workflow of the RPW data processing.



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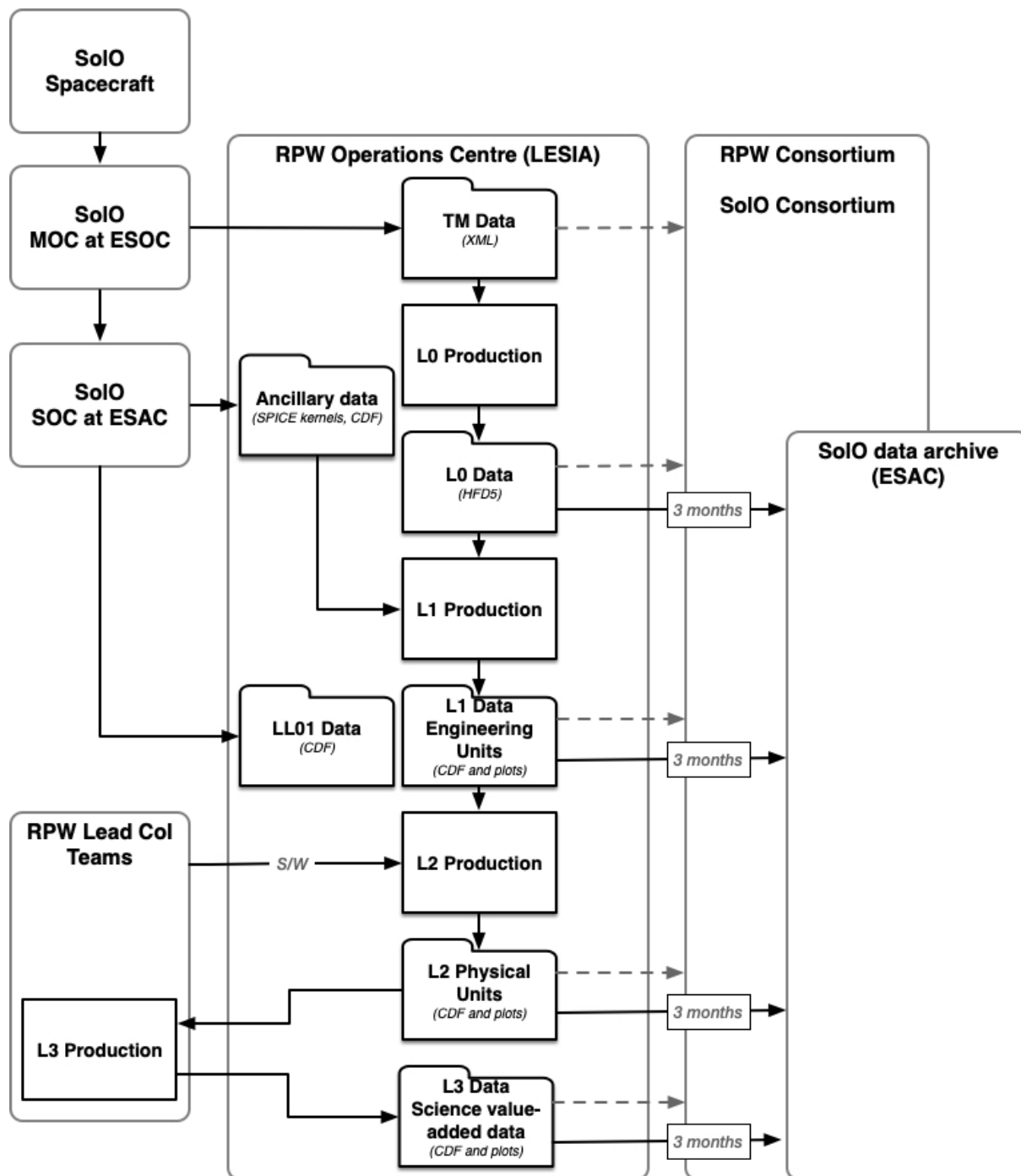


Figure 3. RPW science data processing overview.

The main steps are:

1. New RPW TM data available at the MOC are requested every day (TBC). In the same time, the ROC will retrieve latest ancillary data delivered by SOC (i.e., SPICE kernels and CDF files).
2. Retrieved TM data are analyzed and time ordered. The analysis task mainly consists of verifying integrity, identifying and classifying the incoming TM packets. The packet creation time is converted from On-Board Time (OBT) to UTC time during this step.



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3. Ordered TM data are then saved into daily RPW TM data daily files in XML format (also called “LZ” files).
4. RPW L0 daily files in HDF5 format are generated from the parent daily LZ files.
5. RPW L1 files in CDF are written from the parent L0 file and ancillary data.
6. RPW L2 files in CDF are written from the parent L1 files and ancillary data.
7. RPW L3 files are produced by the RPW Lead CoI teams, then delivered to the ROC.

Notes:

- RPW LZ, L0, L1 and L2 data files will be made available to the RPW and Solar Orbiter teams within 24 hours after their production at ROC. The L3 data files will be available within 24 hours after the ROC reception.
- RPW L0, L1, L2 and L3 data files will be made available to the ESAC public data archive within 3 months (TBC) after their production.
- The Low Latency data processing operates by SOC is outside of the scope of this document.

3.3 Data Generation

The following sections describe the process used to produce the data products described in section 4.

3.3.1 L0 - Raw Data

Description of the process used to obtain this type of data.

3.3.2 L1 - Engineering data (uncalibrated)

Description of the process used to obtain this type of data.

3.3.3 L2 - Science Data (calibrated)

Description of the process used to obtain this type of data.

3.3.4 L3 - Higher level data

Description of the process used to obtain this type of data.

3.3.5 CAL- Calibration data

Description of the process used to obtain this type of data.

3.3.6 ANC - Ancillary data

Description of the process used to obtain this type of data.

3.4 Validation

The following sections describe the process by which the data products are validated.

3.4.1 Instrument Team Validation

To be completed by the Instrument Team.



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3.4.2 SOC Validation

The SOC will check the data types that the RPW team intends to archive. The SOC might also perform spot checks on contents of the files. The exact procedure in which this routine check will take place is still TBD

4 DATA PRODUCT DESCRIPTIONS

RPW data products are formatted in accordance with the [AD.01] document. This section provides details on the formats used for each of the products included in the RPW science data.

4.1 Primary Products Formats

The RPW instrument uses the CDF format(s) for its science data products, except for the L0 data that are saved in the HDF5 format. This section describes the format and record structure of each of the Science data file types.

The following information should be given for each of the data products:

- Product name
- Description
- Descriptor
- Free field
- Level
- Dataset dependencies (if any)
- Associated calibration set (if any)
- Expected cadence and dataset volume

The definitions of these attributes can be found in the Data Products and Filenames Confluence document ([AD.01], section 2.1)

The definitions below shall include all metadata contained in the product, both Solar Orbiter mandatory metadata [AD.01] and Instrument Specific metadata if any. A description of the data content organisation (as described in the aforementioned section of [AD.01]) shall be given as well.

4.1.1 L0 - Raw data products

4.1.1.1 SOLO_L0_RPW data product

The "SOLO_L0_RPW" data product contains RPW "raw" data. According to data processing level definition in [AD.01], the L0 data are the instrument TM unpacked and decompressed.

The "SOLO_L0_RPW" data are written in HDF5 format files. There is a single file per day generated from data in the corresponding RPW TM data (LZ) parent file.

4.1.1.1.1 Filename

solo_L0_RPW_[YYYYMMDD]_V[version].h5



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4.1.1.1.2 Expected data volume and time resolution

Expected data volume: 60 MB per day

Nominal time resolution: Not Applicable (N/A)

4.1.1.1.3 Global Attributes

4.1.1.1.4 Variables

Detailed description of the content and format of the raw data products.

4.1.2 L1 - Engineering data products

Detailed description of the content and format of the partially processed data products.

4.1.2.1 SOLO_L1_RPW-TNR-SURV data product

The "SOLO_L1_RPW-TNR-SURV" data product contains the uncalibrated TNR receiver spectrum survey data.

The "SOLO_L1_RPW-TNR-SURV" data are written in CDF format files. There is a single file per day, generated from data in the corresponding SOLO_L0_RPW parent file.

4.1.2.1.1 Filename

solo_L1_RPW-TNR-SURV_[YYYYMMDD]_V[version].cdf

4.1.2.1.2 Expected data volume and time resolution

Expected data volume: 2 MB per day

Nominal time resolution: 1 TNR spectrum every 12 seconds

4.1.2.1.3 Global Attributes

Table below gives the global attributes for the "SOLO_L1_RPW-TNR-SURV" data products. Comments, which are not supposed to be visible in the CDF, are indicated in italic.

TBW

4.1.2.1.4 Variables

TBW

4.1.2.2 SOLO_L1_RPW-HFR-SURV data product

The "SOLO_L1_RPW-HFR-SURV" data product contains the uncalibrated HFR receiver spectrum survey data.

The "SOLO_L1_RPW-HFR-SURV" data are written in CDF format files. There is a single file per day, generated from data in the corresponding SOLO_L0_RPW parent file.

4.1.2.2.1 Filename

solo_L1_RPW-HFR-SURV_[YYYYMMDD]_V[version].cdf



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4.1.2.2.2 Expected data volume and time resolution

4.1.2.2.3 Global Attributes

4.1.2.2.4 Variables

4.1.2.3 SOLO_L1_RPW-TDS-SURV-RSWF data product

The "SOLO_L1_RPW-TDS-SURV-RSWF" data product contains the uncalibrated TDS receiver Regular Snapshot Waveform survey data.

The "SOLO_L1_RPW-TDS-SURV-RSWF" data are written in CDF format files. There is a single file per day, generated from data in the corresponding SOLO_L0_RPW parent file.

4.1.2.3.1 Filename

solo_L1_RPW-TDS-SURV-RSWF_[YYYYMMDD]_V[version].cdf

4.1.2.3.2 Expected data volume and time resolution

4.1.2.3.3 Global Attributes

4.1.2.3.4 Variables

4.1.2.4 SOLO_L1_RPW-TDS-SURV-TSWF data product

The "SOLO_L1_RPW-TDS-SURV-TSWF" data product contains the uncalibrated TDS receiver Triggered Snapshot Waveform survey data.

The "SOLO_L1_RPW-TDS-SURV-TSWF" data are written in CDF format files. There is a single file per day, generated from data in the corresponding SOLO_L0_RPW parent file.

4.1.2.4.1 Filename

solo_L1_RPW-TDS-SURV-TSWF_[YYYYMMDD]_V[version].cdf

4.1.2.4.2 Expected data volume and time resolution

4.1.2.4.3 Global Attributes

4.1.2.4.4 Variables

4.1.2.5 SOLO_L1_RPW-TDS-SURV-HIST1D data product

The "SOLO_L1_RPW-TDS-SURV-HIST1D" data product contains the uncalibrated TDS receiver 1D histogram survey data.

The "SOLO_L1_RPW-TDS-SURV-HIST1D" data are written in CDF format files. There is a single file per day, generated from data in the corresponding SOLO_L0_RPW parent file.

4.1.2.5.1 Filename

solo_L1_RPW-TDS-SURV-HIST1D_[YYYYMMDD]_V[version].cdf

4.1.2.5.2 Expected data volume and time resolution

4.1.2.5.3 Global Attributes

4.1.2.5.4 Variables

4.1.2.6 SOLO_L1_RPW-TDS-SURV-HIST2D data product

The "SOLO_L1_RPW-TDS-SURV-HIST2D" data product contains the uncalibrated TDS receiver 2D histogram survey data.



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The "SOLO_L1_RPW-TDS-SURV-HIST2D" data are written in CDF format files. There is a single file per day, generated from data in the corresponding SOLO_L0_RPW parent file.

4.1.2.6.1 Filename

solo_L1_RPW-TDS-SURV-HIST2D_[YYYYMMDD]_V[version].cdf

4.1.2.6.2 Expected data volume and time resolution

4.1.2.6.3 Global Attributes

4.1.2.6.4 Variables

4.1.2.7 SOLO_L1_RPW-TDS-SURV-STAT data product

The "SOLO_L1_RPW-TDS-SURV-STAT" data product contains the uncalibrated TDS receiver dust statistics survey data.

The "SOLO_L1_RPW-TDS-SURV-STAT" data are written in CDF format files. There is a single file per day, generated from data in the corresponding SOLO_L0_RPW parent file.

4.1.2.7.1 Filename

solo_L1_RPW-TDS-SURV-STAT_[YYYYMMDD]_V[version].cdf

4.1.2.7.2 Expected data volume and time resolution

4.1.2.7.3 Global Attributes

4.1.2.7.4 Variables

4.1.2.8 SOLO_L1_RPW-TDS-SURV-MAMP data product

The "SOLO_L1_RPW-TDS-SURV-MAMP" data product contains the uncalibrated TDS receiver continuous HF signal maximum data survey data.

The "SOLO_L1_RPW-TDS-SURV-MAMP" data are written in CDF format files. There is a single file per day, generated from data in the corresponding SOLO_L0_RPW parent file.

4.1.2.8.1 Filename

solo_L1_RPW-TDS-SURV-MAMP_[YYYYMMDD]_V[version].cdf

4.1.2.8.2 Expected data volume and time resolution

4.1.2.8.3 Global Attributes

4.1.2.8.4 Variables

4.1.2.9 SOLO_L1_RPW-TDS-LFM-RSWF data product

The "SOLO_L1_RPW-TDS-LFM-RSWF" data product contains the uncalibrated TDS receiver Regular Snapshot Waveform data in LFM mode.

The "SOLO_L1_RPW-TDS-LFM-RSWF" data are written in CDF format files. There is a single file per day, generated from data in the corresponding SOLO_L0_RPW parent file.

4.1.2.9.1 Filename

solo_L1_RPW-TDS-LFM-RSWF_[YYYYMMDD]_V[version].cdf



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4.1.2.9.2 Expected data volume and time resolution

4.1.2.9.3 Global Attributes

4.1.2.9.4 Variables

4.1.2.10 SOLO_L1_RPW-TDS-LFM-CWF data product

The "SOLO_L1_RPW-TDS-LFM-CWF" data product contains the uncalibrated TDS receiver Continuous Waveform data in the LFM mode.

The "SOLO_L1_RPW-TDS-LFM-CWF" data are written in CDF format files. There is a single file per day, generated from data in the corresponding SOLO_L0_RPW parent file.

4.1.2.10.1 Filename

solo_L1_RPW-TDS-LFM-CWF_[YYYYMMDD]_V[version].cdf

4.1.2.10.2 Expected data volume and time resolution

4.1.2.10.3 Global Attributes

4.1.2.10.4 Variables

4.1.2.11 SOLO_L1_RPW-TDS-LFM-SM data product

The "SOLO_L1_RPW-TDS-LFM-SM" data product contains the uncalibrated TDS receiver spectral matrix data in the LFM mode.

The "SOLO_L1_RPW-TDS-LFM-SM" data are written in CDF format files. There is a single file per day, generated from data in the corresponding SOLO_L0_RPW parent file.

4.1.2.11.1 Filename

solo_L1_RPW-TDS-LFM-SM_[YYYYMMDD]_V[version].cdf

4.1.2.11.2 Expected data volume and time resolution

4.1.2.11.3 Global Attributes

4.1.2.11.4 Variables

4.1.2.12 SOLO_L1_RPW-TDS-LFM-PSD data product

The "SOLO_L1_RPW-TDS-LFM-PSD" data product contains the uncalibrated TDS receiver single power spectrum data in LFM mode.

The "SOLO_L1_RPW-TDS-LFM-PSD" data are written in CDF format files. There is a single file per day, generated from data in the corresponding SOLO_L0_RPW parent file.

4.1.2.12.1 Filename

solo_L1_RPW-TDS-LFM-PSD_[YYYYMMDD]_V[version].cdf



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4.1.2.12.2 Expected data volume and time resolution

4.1.2.12.3 Global Attributes

4.1.2.12.4 Variables

4.1.2.13 SOLO_L1_RPW-TDS-SBM1-RSWF data product

The "SOLO_L1_RPW-TDS-SBM1-RSWF" data product contains the uncalibrated TDS receiver Regular Snapshot Waveform data for SBM1 events.

The "SOLO_L1_RPW-TDS-SBM1-RSWF" data are written in CDF format files. There is a single file per SBM1 event data effectively downlinked on-ground. The file is generated from data in the corresponding SOLO_L0_RPW parent file.

4.1.2.13.1 Filename

solo_L1_RPW-TDS-SBM1-RSWF_[YYYYMMDDThhmmss1-
YYYYMMDDThhmmss2]_V[version].cdf

4.1.2.13.2 Expected data volume and time resolution

4.1.2.13.3 Global Attributes

4.1.2.13.4 Variables

4.1.2.14 SOLO_L1_RPW-TDS-SBM2-TSWF data product

The "SOLO_L1_RPW-TDS-SBM2-TSWF" data product contains the uncalibrated TDS receiver Regular Snapshot Waveform data for SBM2 events.

The "SOLO_L1_RPW-TDS-SBM2-TSWF" data are written in CDF format files. There is a single file per SBM2 event data effectively downlinked on-ground. The file is generated from data in the corresponding SOLO_L0_RPW parent file.

4.1.2.14.1 Filename

solo_L1_RPW-TDS-SBM2-TSWF_[YYYYMMDDThhmmss1-
YYYYMMDDThhmmss2]_V[version].cdf

4.1.2.14.2 Expected data volume and time resolution

4.1.2.14.3 Global Attributes

4.1.2.14.4 Variables

4.1.2.15 SOLO_L1_RPW-LFR-SURV-ASM data product

The "SOLO_L1_RPW-LFR-SURV-ASM" data product contains the uncalibrated LFR receiver Averaged Spectral Matrix survey data.

The "SOLO_L1_RPW-LFR-SURV-ASM" data are written in CDF format files. There is a single file per day, generated from data in the corresponding SOLO_L0_RPW parent file.

4.1.2.15.1 Filename

solo_L1_RPW-LFR-SURV-ASM_[YYYYMMDD]_V[version].cdf



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4.1.2.15.2 Expected data volume and time resolution

4.1.2.15.3 Global Attributes

4.1.2.15.4 Variables

4.1.2.16 SOLO_L1_RPW-LFR-SURV-BP1 data product

The "SOLO_L1_RPW-LFR-SURV-BP1" data product contains the uncalibrated LFR receiver Basic Parameters 1 survey data.

The "SOLO_L1_RPW-LFR-SURV-BP1" data are written in CDF format files. There is a single file per day, generated from data in the corresponding SOLO_L0_RPW parent file.

4.1.2.16.1 Filename

solo_L1_RPW-LFR-SURV-BP1_[YYYYMMDD]_V[version].cdf

4.1.2.16.2 Expected data volume and time resolution

4.1.2.16.3 Global Attributes

4.1.2.16.4 Variables

4.1.2.17 SOLO_L1_RPW-LFR-SURV-BP2 data product

The "SOLO_L1_RPW-LFR-SURV-BP2" data product contains the uncalibrated LFR receiver Basic Parameters 2 survey data.

The "SOLO_L1_RPW-LFR-SURV-BP2" data are written in CDF format files. There is a single file per day, generated from data in the corresponding SOLO_L0_RPW parent file.

4.1.2.17.1 Filename

solo_L1_RPW-LFR-SURV-BP2_[YYYYMMDD]_V[version].cdf

4.1.2.17.2 Expected data volume and time resolution

4.1.2.17.3 Global Attributes

4.1.2.17.4 Variables

4.1.2.18 SOLO_L1_RPW-LFR-SURV-CWF data product

The "SOLO_L1_RPW-LFR-SURV-CWF" data product contains the uncalibrated LFR receiver Continuous Waveform survey data.

The "SOLO_L1_RPW-LFR-SURV-CWF" data are written in CDF format files. There is a single file per day, generated from data in the corresponding SOLO_L0_RPW parent file.

4.1.2.18.1 Filename

solo_L1_RPW-LFR-SURV-CWF_[YYYYMMDD]_V[version].cdf

4.1.2.18.2 Expected data volume and time resolution

4.1.2.18.3 Global Attributes

4.1.2.18.4 Variables



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4.1.2.19 SOLO_L1_RPW-LFR-SURV-SWF data product

The "SOLO_L1_RPW-LFR-SURV-SWF" data product contains the uncalibrated LFR receiver Snapshot Waveform survey data.

The "SOLO_L1_RPW-LFR-SURV-SWF" data are written in CDF format files. There is a single file per day, generated from data in the corresponding SOLO_L0_RPW parent file.

4.1.2.19.1 Filename

solo_L1_RPW-LFR-SURV-SWF_[YYYYMMDD]_V[version].cdf

4.1.2.19.2 Expected data volume and time resolution

4.1.2.19.3 Global Attributes

4.1.2.19.4 Variables

4.1.2.20 SOLO_L1_RPW-LFR-SBM1-CWF data product

The "SOLO_L1_RPW-LFR-SBM1-CWF" data product contains the uncalibrated LFR receiver Continuous Waveform data for SBM1 events.

The "SOLO_L1_RPW-LFR-SBM1-CWF" data are written in CDF format files. There is a single file per SBM1 event data downlinked on-ground. The file is generated from data in the corresponding SOLO_L0_RPW parent file.

4.1.2.20.1 Filename

solo_L1_RPW-LFR-SBM1-CWF_[YYYYMMDD]_V[version].cdf

4.1.2.20.2 Expected data volume and time resolution

4.1.2.20.3 Global Attributes

4.1.2.20.4 Variables

4.1.2.21 SOLO_L1_RPW-LFR-SBM1-BP1 data product

The "SOLO_L1_RPW-LFR-SBM1-BP1" data product contains the uncalibrated LFR receiver Basic Parameters 1 data for SBM1 events.

The "SOLO_L1_RPW-LFR-SBM1-BP1" data are written in CDF format files. There is a single file per SBM1 event data downlinked on-ground. The file is generated from data in the corresponding SOLO_L0_RPW parent file.

4.1.2.21.1 Filename

solo_L1_RPW-LFR-SBM1-BP1_[YYYYMMDD]_V[version].cdf

4.1.2.21.2 Expected data volume and time resolution

4.1.2.21.3 Global Attributes

4.1.2.21.4 Variables



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4.1.2.22 SOLO_L1_RPW-LFR-SBM1-BP2 data product

The "SOLO_L1_RPW-LFR-SBM1-BP2" data product contains the uncalibrated LFR receiver Basic Parameters 2 data for SBM1 events.

The "SOLO_L1_RPW-LFR-SBM2-BP1" data are written in CDF format files. There is a single file per SBM1 event data downlinked on-ground. The file is generated from data in the corresponding SOLO_L0_RPW parent file.

4.1.2.22.1 Filename

solo_L1_RPW-LFR-SBM1-BP2_[YYYYMMDD]_V[version].cdf

4.1.2.22.2 Expected data volume and time resolution

4.1.2.22.3 Global Attributes

4.1.2.22.4 Variables

4.1.2.23 SOLO_L1_RPW-LFR-SBM2-CWF data product

The "SOLO_L1_RPW-LFR-SBM2-CWF" data product contains the uncalibrated LFR receiver Continuous Waveform data for SBM1 events.

The "SOLO_L1_RPW-LFR-SBM2-CWF" data are written in CDF format files. There is a single file per SBM2 event data downlinked on-ground. The file is generated from data in the corresponding SOLO_L0_RPW parent file.

4.1.2.23.1 Filename

solo_L1_RPW-LFR-SBM2-CWF_[YYYYMMDD]_V[version].cdf

4.1.2.23.2 Expected data volume and time resolution

4.1.2.23.3 Global Attributes

4.1.2.23.4 Variables

4.1.2.24 SOLO_L1_RPW-LFR-SBM2-BP1 data product

The "SOLO_L1_RPW-LFR-SBM2-BP1" data product contains the uncalibrated LFR receiver Basic Parameters 1 data for SBM2 events.

The "SOLO_L1_RPW-LFR-SBM2-BP1" data are written in CDF format files. There is a single file per SBM2 event data downlinked on-ground. The file is generated from data in the corresponding RPW SOLO_L0_RPW parent file.

4.1.2.24.1 Filename

solo_L1_RPW-LFR-SBM2-BP1_[YYYYMMDD]_V[version].cdf

4.1.2.24.2 Expected data volume and time resolution

4.1.2.24.3 Global Attributes

4.1.2.24.4 Variables



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4.1.2.25 SOLO_L1_RPW-LFR-SBM2-BP2 data product

The "SOLO_L1_RPW-LFR-SBM2-BP2" data product contains the uncalibrated LFR receiver Basic Parameters 1 data for SBM2 events.

The "SOLO_L1_RPW-LFR-SBM2-BP2" data are written in CDF format files. There is a single file per SBM2 event data downlinked on-ground. The file is generated from data in the corresponding SOLO_L0_RPW parent file.

4.1.2.25.1 Filename

solo_L1_RPW-LFR-SBM2-BP2_[YYYYMMDD]_V[version].cdf

4.1.2.25.2 Expected data volume and time resolution

4.1.2.25.3 Global Attributes

4.1.2.25.4 Variables

4.1.2.26 SOLO_L1_RPW-BIA-SWEEP data product

The "SOLO_L1_RPW-BIA-SWEEP" data product contains the uncalibrated Bias unit sweeping data.

The "SOLO_L1_RPW-BIA-SWEEP" data are written in CDF format files. There is a single file per Bias unit sweeping. The file is generated from data in the corresponding SOLO_L0_RPW parent file.

4.1.2.26.1 Filename

solo_L1_RPW-BIA-SWEEP_[YYYYMMDDThhmmss1-
YYYYMMDDThhmmss2]_V[version].cdf

4.1.2.26.2 Expected data volume and time resolution

4.1.2.26.3 Global Attributes

4.1.2.26.4 Variables

4.1.2.27 SOLO_L1_RPW-BIA-CURRENT data product

The "SOLO_L1_RPW-BIA-CURRENT" data product contains the uncalibrated Bias unit current data.

The "SOLO_L1_RPW-BIA-CURRENT" data are written in CDF format files. There is a single file per **TBD**. The file is generated from data in the corresponding SOLO_L0_RPW and SOLO_LL01_RPW-BIA parent files.

4.1.2.27.1 Filename

solo_L1_RPW-BIA-CURRENT_[YYYYMMDDThhmmss1-
YYYYMMDDThhmmss2]_V[version].cdf

4.1.2.27.2 Expected data volume and time resolution

4.1.2.27.3 Global Attributes

4.1.2.27.4 Variables



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4.1.3 L2 - Science data products

Detailed description of the content and format of the calibrated data products.

4.1.3.1 SOLO_L2_RPW-TNR-SURV data product

The "SOLO_L2_RPW-TNR-SURV" data product contains the calibrated TNR receiver spectrum survey data.

The "SOLO_L2_RPW-TNR-SURV" data are written in CDF format files. There is a single file per day, generated from data in the corresponding SOLO_L2_RPW-TNR-SYRV parent file.

4.1.3.1.1 Filename

solo_L2_RPW-TNR-SURV_[YYYYMMDD]_V[version].cdf

4.1.3.1.2 Expected data volume and time resolution

Expected data volume: TBD

Nominal time resolution: 1 TNR spectrum every 12 seconds

4.1.3.1.3 Global Attributes

Table below gives the global attributes for the "SOLO_L1_RPW-TNR-SURV" data products. Comments, which are not supposed to be visible in the CDF, are indicated in *italic*.

TBW

4.1.3.1.4 Variables

TBW

4.1.3.2 SOLO_L2_RPW-HFR-SURV data product

The "SOLO_L2_RPW-HFR-SURV" data product contains the calibrated HFR receiver spectrum survey data.

The "SOLO_L2_RPW-HFR-SURV" data are written in CDF format files. There is a single file per day, generated from data in the corresponding SOLO_L2_RPW-HFR-SURV parent file.



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4.1.3.2.1 Filename

solo_L2_RPW-HFR-SURV_[YYYYMMDD]_V[version].cdf

4.1.3.2.2 Expected data volume and time resolution

4.1.3.2.3 Global Attributes

4.1.3.2.4 Variables

4.1.3.3 SOLO_L2_RPW-TDS-SURV-RSWF-E data product

The "SOLO_L2_RPW-TDS-SURV-RSWF-E" data product contains the calibrated TDS receiver Regular Snapshot Waveform survey data for electrical component only.

The "SOLO_L2_RPW-TDS-SURV-RSWF-E" data are written in CDF format files. There is a single file per day, generated from data in the corresponding SOLO_L1_RPW-TDS-SURV-RSWF parent file.

4.1.3.3.1 Filename

solo_L2_RPW-TDS-SURV-RSWF-E_[YYYYMMDD]_V[version].cdf

4.1.3.3.2 Expected data volume and time resolution

4.1.3.3.3 Global Attributes

4.1.3.3.4 Variables

4.1.3.4 SOLO_L2_RPW-TDS-SURV-RSWF-B data product

The "SOLO_L2_RPW-TDS-SURV-RSWF-B" data product contains the calibrated TDS receiver Regular Snapshot Waveform survey data for magnetic component only.

The "SOLO_L2_RPW-TDS-SURV-RSWF-B" data are written in CDF format files. There is a single file per day, generated from data in the corresponding SOLO_L1_RPW-TDS-SURV-RSWF parent file.

4.1.3.4.1 Filename

solo_L2_RPW-TDS-SURV-RSWF-B_[YYYYMMDD]_V[version].cdf

4.1.3.4.2 Expected data volume and time resolution

4.1.3.4.3 Global Attributes

4.1.3.4.4 Variables

4.1.3.5 SOLO_L2_RPW-TDS-SURV-TSWF-E data product

The "SOLO_L2_RPW-TDS-SURV-TSWF-E" data product contains the calibrated TDS receiver Triggered Snapshot Waveform survey data for electrical component only.

The "SOLO_L2_RPW-TDS-SURV-TSWF-E" data are written in CDF format files. There is a single file per day, generated from data in the corresponding SOLO_L1_RPW-TDS-SURV-TSWF parent file.



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4.1.3.5.1 Filename

solo_L2_RPW-TDS-SURV-TSWF-E_[YYYYMMDD]_V[version].cdf

4.1.3.5.2 Expected data volume and time resolution

4.1.3.5.3 Global Attributes

4.1.3.5.4 Variables

4.1.3.6 SOLO_L2_RPW-TDS-SURV-TSWF-B data product

The "SOLO_L2_RPW-TDS-SURV-TSWF-B" data product contains the calibrated TDS receiver Triggered Snapshot Waveform survey data for magnetic component only.

The "SOLO_L2_RPW-TDS-SURV-TSWF-B" data are written in CDF format files. There is a single file per day, generated from data in the corresponding SOLO_L1_RPW-TDS-SURV-TSWF parent file.

4.1.3.6.1 Filename

solo_L2_RPW-TDS-SURV-TSWF-B_[YYYYMMDD]_V[version].cdf

4.1.3.6.2 Expected data volume and time resolution

4.1.3.6.3 Global Attributes

4.1.3.6.4 Variables

4.1.3.7 SOLO_L2_RPW-TDS-SURV-HIST1D data product

The "SOLO_L2_RPW-TDS-SURV-HIST1D" data product contains the calibrated TDS receiver 1D histogram survey data.

The "SOLO_L2_RPW-TDS-SURV-HIST1D" data are written in CDF format files. There is a single file per day, generated from data in the corresponding SOLO_L1_RPW-TDS-SURV-HIST1D parent file.

4.1.3.7.1 Filename

solo_L2_RPW-TDS-SURV-HIST1D_[YYYYMMDD]_V[version].cdf

4.1.3.7.2 Expected data volume and time resolution

4.1.3.7.3 Global Attributes

4.1.3.7.4 Variables

4.1.3.8 SOLO_L2_RPW-TDS-SURV-HIST2D data product

The "SOLO_L2_RPW-TDS-SURV-HIST2D" data product contains the calibrated TDS receiver 2D histogram survey data.

The "SOLO_L2_RPW-TDS-SURV-HIST2D" data are written in CDF format files. There is a single file per day, generated from data in the corresponding SOLO_L2_RPW-TDS-SURV-HIST2D parent file.



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4.1.3.8.1 Filename

solo_L2_RPW-TDS-SURV-HIST2D_[YYYYMMDD]_V[version].cdf

4.1.3.8.2 Expected data volume and time resolution

4.1.3.8.3 Global Attributes

4.1.3.8.4 Variables

4.1.3.9 SOLO_L2_RPW-TDS-SURV-STAT data product

The "SOLO_L2_RPW-TDS-SURV-STAT" data product contains the calibrated TDS receiver dust statistics survey data.

The "SOLO_L2_RPW-TDS-SURV-STAT" data are written in CDF format files. There is a single file per day, generated from data in the corresponding SOLO_L1_RPW-TDS-SURV-STAT parent file.

4.1.3.9.1 Filename

solo_L2_RPW-TDS-SURV-STAT_[YYYYMMDD]_V[version].cdf

4.1.3.9.2 Expected data volume and time resolution

4.1.3.9.3 Global Attributes

4.1.3.9.4 Variables

4.1.3.10 SOLO_L2_RPW-TDS-SURV-MAMP data product

The "SOLO_L2_RPW-TDS-SURV-MAMP" data product contains the calibrated TDS receiver continuous HF signal maximum data survey data.

The "SOLO_L2_RPW-TDS-SURV-MAMP" data are written in CDF format files. There is a single file per day, generated from data in the corresponding SOLO_L1_RPW-TDS-SURV-MAMP parent file.

4.1.3.10.1 Filename

solo_L2_RPW-TDS-SURV-MAMP_[YYYYMMDD]_V[version].cdf

4.1.3.10.2 Expected data volume and time resolution

4.1.3.10.3 Global Attributes

4.1.3.10.4 Variables

4.1.3.11 SOLO_L2_RPW-TDS-LFM-RSWF-E data product

The "SOLO_L2_RPW-TDS-LFM-RSWF-E" data product contains the calibrated TDS receiver Regular Snapshot Waveform data in LFM mode for electrical component only.

The "SOLO_L2_RPW-TDS-LFM-RSWF-E" data are written in CDF format files. There is a single file per day, generated from data in the corresponding SOLO_L1_RPW-TDS-LFM-RSWF parent file.

4.1.3.11.1 Filename

solo_L2_RPW-TDS-LFM-RSWF-E_[YYYYMMDD]_V[version].cdf



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4.1.3.11.2 Expected data volume and time resolution

4.1.3.11.3 Global Attributes

4.1.3.11.4 Variables

4.1.3.12 SOLO_L2_RPW-TDS-LFM-RSWF-B data product

The "SOLO_L2_RPW-TDS-LFM-RSWF-B" data product contains the calibrated TDS receiver Regular Snapshot Waveform data in LFM mode for magnetic component only.

The "SOLO_L2_RPW-TDS-LFM-RSWF-B" data are written in CDF format files. There is a single file per day, generated from data in the corresponding SOLO_L1_RPW-TDS-LFM-RSWF parent file.

4.1.3.12.1 Filename

solo_L2_RPW-TDS-LFM-RSWF-B_[YYYYMMDD]_V[version].cdf

4.1.3.12.2 Expected data volume and time resolution

4.1.3.12.3 Global Attributes

4.1.3.12.4 Variables

4.1.3.13 SOLO_L2_RPW-TDS-LFM-CWF-E data product

The "SOLO_L2_RPW-TDS-LFM-CWF-E" data product contains the calibrated TDS receiver Continuous Waveform data in the LFM mode for electrical component only.

The "SOLO_L2_RPW-TDS-LFM-CWF-E" data are written in CDF format files. There is a single file per day, generated from data in the corresponding SOLO_L1_RPW-TDS-LFM-CWF parent file.

4.1.3.13.1 Filename

solo_L2_RPW-TDS-LFM-CWF-E_[YYYYMMDD]_V[version].cdf

4.1.3.13.2 Expected data volume and time resolution

4.1.3.13.3 Global Attributes

4.1.3.13.4 Variables

4.1.3.14 SOLO_L2_RPW-TDS-LFM-CWF-B data product

The "SOLO_L2_RPW-TDS-LFM-CWF-B" data product contains the calibrated TDS receiver Continuous Waveform data in the LFM mode for magnetic component only.

The "SOLO_L2_RPW-TDS-LFM-CWF-B" data are written in CDF format files. There is a single file per day, generated from data in the corresponding SOLO_L1_RPW-TDS-LFM-CWF parent file.

4.1.3.14.1 Filename

solo_L2_RPW-TDS-LFM-CWF-B_[YYYYMMDD]_V[version].cdf



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4.1.3.14.2 Expected data volume and time resolution

4.1.3.14.3 Global Attributes

4.1.3.14.4 Variables

4.1.3.15 SOLO_L2_RPW-TDS-LFM-PSDSM data product

The "SOLO_L2_RPW-TDS-LFM-PSDSM" data product contains the calibrated TDS receiver spectral matrix data in the LFM mode.

The "SOLO_L2_RPW-TDS-LFM-PSDSM" data are written in CDF format files. There is a single file per day, generated from data in the corresponding SOLO_L1_RPW-TDS-LFM-PSD and SOLO_L1_RPW-TDS-LFM-SM parent files.

4.1.3.15.1 Filename

solo_L2_RPW-TDS-LFM-PSDSM_[YYYYMMDD]_V[version].cdf

4.1.3.15.2 Expected data volume and time resolution

4.1.3.15.3 Global Attributes

4.1.3.15.4 Variables

4.1.3.16 SOLO_L2_RPW-TDS-SBM1-RSWF-E data product

The "SOLO_L2_RPW-TDS-SBM1-RSWF-E" data product contains the calibrated TDS receiver Regular Snapshot Waveform data for SBM1 events for electrical component only.

The "SOLO_L2_RPW-TDS-SBM1-RSWF-E" data are written in CDF format files. There is a single file per SBM1 event data effectively downlinked on-ground. The file is generated from data in the corresponding SOLO_L1_RPW-TDS-SBM1-RSWF parent file.

4.1.3.16.1 Filename

solo_L2_RPW-TDS-SBM1-RSWF-E_[YYYYMMDDThhmmss1-
YYYYMMDDThhmmss2]_V[version].cdf

4.1.3.16.2 Expected data volume and time resolution

4.1.3.16.3 Global Attributes

4.1.3.16.4 Variables

4.1.3.17 SOLO_L2_RPW-TDS-SBM1-RSWF-B data product

The "SOLO_L2_RPW-TDS-SBM1-RSWF-B" data product contains the calibrated TDS receiver Regular Snapshot Waveform data for SBM1 events for magnetic component only.

The "SOLO_L2_RPW-TDS-SBM1-RSWF-B" data are written in CDF format files. There is a single file per SBM1 event data effectively downlinked on-ground. The file is generated from data in the corresponding SOLO_L1_RPW-TDS-SBM1-RSWF parent file.

4.1.3.17.1 Filename

solo_L2_RPW-TDS-SBM1-RSWF-B_[YYYYMMDDThhmmss1-
YYYYMMDDThhmmss2]_V[version].cdf



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4.1.3.17.2 Expected data volume and time resolution

4.1.3.17.3 Global Attributes

4.1.3.17.4 Variables

4.1.3.18 SOLO_L2_RPW-TDS-SBM2-TSWF-E data product

The "SOLO_L2_RPW-TDS-SBM2-TSWF-E" data product contains the calibrated TDS receiver Regular Snapshot Waveform data for SBM2 events for electrical components only.

The "SOLO_L2_RPW-TDS-SBM2-TSWF-E" data are written in CDF format files. There is a single file per SBM2 event data effectively downlinked on-ground. The file is generated from data in the corresponding SOLO_L1_RPW-TDS-SBM2-TSWF parent file.

4.1.3.18.1 Filename

solo_L2_RPW-TDS-SBM2-TSWF-E_[YYYYMMDDThhmmss1-
YYYYMMDDThhmmss2]_V[version].cdf

4.1.3.18.2 Expected data volume and time resolution

4.1.3.18.3 Global Attributes

4.1.3.18.4 Variables

4.1.3.19 SOLO_L2_RPW-TDS-SBM2-TSWF-B data product

The "SOLO_L2_RPW-TDS-SBM2-TSWF-B" data product contains the calibrated TDS receiver Regular Snapshot Waveform data for SBM2 events for magnetic components only.

The "SOLO_L2_RPW-TDS-SBM2-TSWF-B" data are written in CDF format files. There is a single file per SBM2 event data effectively downlinked on-ground. The file is generated from data in the corresponding SOLO_L1_RPW-TDS-SBM2-TSWF parent file.

4.1.3.19.1 Filename

solo_L2_RPW-TDS-SBM2-TSWF-B_[YYYYMMDDThhmmss1-
YYYYMMDDThhmmss2]_V[version].cdf

4.1.3.19.2 Expected data volume and time resolution

4.1.3.19.3 Global Attributes

4.1.3.19.4 Variables

4.1.3.20 SOLO_L2_RPW-LFR-SURV-ASM data product

The "SOLO_L2_RPW-LFR-SURV-ASM" data product contains the calibrated LFR receiver Averaged Spectral Matrix survey data.

The "SOLO_L2_RPW-LFR-SURV-ASM" data are written in CDF format files. There is a single file per day, generated from data in the corresponding SOLO_L1_RPW-LFR-SURV-ASM parent file.



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4.1.3.20.1 Filename

solo_L2_RPW-LFR-SURV-ASM_[YYYYMMDD]_V[version].cdf

4.1.3.20.2 Expected data volume and time resolution

4.1.3.20.3 Global Attributes

4.1.3.20.4 Variables

4.1.3.21 SOLO_L2_RPW-LFR-SURV-BP1 data product

The "SOLO_L2_RPW-LFR-SURV-BP1" data product contains the calibrated LFR receiver Basic Parameters 1 survey data.

The "SOLO_L2_RPW-LFR-SURV-BP1" data are written in CDF format files. There is a single file per day, generated from data in the corresponding SOLO_L1_RPW-LFR-SURV-BP1 parent file.

4.1.3.21.1 Filename

solo_L2_RPW-LFR-SURV-BP1_[YYYYMMDD]_V[version].cdf

4.1.3.21.2 Expected data volume and time resolution

4.1.3.21.3 Global Attributes

4.1.3.21.4 Variables

4.1.3.22 SOLO_L2_RPW-LFR-SURV-BP2 data product

The "SOLO_L2_RPW-LFR-SURV-BP2" data product contains the calibrated LFR receiver Basic Parameters 2 survey data.

The "SOLO_L2_RPW-LFR-SURV-BP2" data are written in CDF format files. There is a single file per day, generated from data in the corresponding SOLO_L1_RPW-LFR-SURV-BP2 parent file.

4.1.3.22.1 Filename

solo_L2_RPW-LFR-SURV-BP2_[YYYYMMDD]_V[version].cdf

4.1.3.22.2 Expected data volume and time resolution

4.1.3.22.3 Global Attributes

4.1.3.22.4 Variables

4.1.3.23 SOLO_L2_RPW-LFR-SURV-CWF-E data product

The "SOLO_L2_RPW-LFR-SURV-CWF-E" data product contains the calibrated LFR receiver Continuous Waveform survey data for electrical component only.

The "SOLO_L2_RPW-LFR-SURV-CWF-E" data are written in CDF format files. There is a single file per day, generated from data in the corresponding SOLO_L1_RPW-LFR-SURV-CWF parent file.



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4.1.3.23.1 Filename

solo_L2_RPW-LFR-SURV-CWF-E_[YYYYMMDD]_V[version].cdf

4.1.3.23.2 Expected data volume and time resolution

4.1.3.23.3 Global Attributes

4.1.3.23.4 Variables

4.1.3.24 SOLO_L2_RPW-LFR-SURV-CWF-B data product

The "SOLO_L2_RPW-LFR-SURV-CWF-B" data product contains the calibrated LFR receiver Continuous Waveform survey data for magnetic component only.

The "SOLO_L2_RPW-LFR-SURV-CWF-B" data are written in CDF format files. There is a single file per day, generated from data in the corresponding SOLO_L1_RPW-LFR-SURV-CWF parent file.

4.1.3.24.1 Filename

solo_L2_RPW-LFR-SURV-CWF-B_[YYYYMMDD]_V[version].cdf

4.1.3.24.2 Expected data volume and time resolution

4.1.3.24.3 Global Attributes

4.1.3.24.4 Variables

4.1.3.25 SOLO_L2_RPW-LFR-SURV-SWF-E data product

The "SOLO_L2_RPW-LFR-SURV-SWF-E" data product contains the calibrated LFR receiver Snapshot Waveform survey data for electrical components only.

The "SOLO_L2_RPW-LFR-SURV-SWF-E" data are written in CDF format files. There is a single file per day, generated from data in the corresponding SOLO_L1_RPW-LFR-SURV-SWF parent file.

4.1.3.25.1 Filename

solo_L2_RPW-LFR-SURV-SWF-E_[YYYYMMDD]_V[version].cdf

4.1.3.25.2 Expected data volume and time resolution

4.1.3.25.3 Global Attributes

4.1.3.25.4 Variables

4.1.3.26 SOLO_L2_RPW-LFR-SURV-SWF-B data product

The "SOLO_L2_RPW-LFR-SURV-SWF-B" data product contains the calibrated LFR receiver Snapshot Waveform survey data for magnetic components only.



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The "SOLO_L2_RPW-LFR-SURV-SWF-B" data are written in CDF format files. There is a single file per day, generated from data in the corresponding SOLO_L1_RPW-LFR-SURV-SWF-B parent file.

4.1.3.26.1 Filename

solo_L2_RPW-LFR-SURV-SWF-B_[YYYYMMDD]_V[version].cdf

4.1.3.26.2 Expected data volume and time resolution

4.1.3.26.3 Global Attributes

4.1.3.26.4 Variables

4.1.3.27 SOLO_L2_RPW-LFR-SBM1-CWF-E data product

The "SOLO_L2_RPW-LFR-SBM1-CWF-E" data product contains the calibrated LFR receiver Continuous Waveform data for SBM1 events for electrical components only.

The "SOLO_L2_RPW-LFR-SBM1-CWF-E" data are written in CDF format files. There is a single file per SBM1 event data downlinked on-ground. The file is generated from data in the corresponding SOLO_L1_RPW-LFR-SBM1-CWF parent file.

4.1.3.27.1 Filename

solo_L2_RPW-LFR-SBM1-CWF-E_[YYYYMMDD]_V[version].cdf

4.1.3.27.2 Expected data volume and time resolution

4.1.3.27.3 Global Attributes

4.1.3.27.4 Variables

4.1.3.28 SOLO_L2_RPW-LFR-SBM1-CWF-B data product

The "SOLO_L2_RPW-LFR-SBM1-CWF-B" data product contains the calibrated LFR receiver Continuous Waveform data for SBM1 events for magnetic components only.

The "SOLO_L2_RPW-LFR-SBM1-CWF-B" data are written in CDF format files. There is a single file per SBM1 event data downlinked on-ground. The file is generated from data in the corresponding SOLO_L1_RPW-LFR-SBM1-CWF parent file.

4.1.3.28.1 Filename

solo_L2_RPW-LFR-SBM1-CWF-B_[YYYYMMDD]_V[version].cdf

4.1.3.28.2 Expected data volume and time resolution

4.1.3.28.3 Global Attributes

4.1.3.28.4 Variables

4.1.3.29 SOLO_L2_RPW-LFR-SBM1-BP1 data product

The "SOLO_L2_RPW-LFR-SBM1-BP1" data product contains the calibrated LFR receiver Basic Parameters 1 data for SBM1 events.



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The "SOLO_L2_RPW-LFR-SBM1-BP1" data are written in CDF format files. There is a single file per SBM1 event data downlinked on-ground. The file is generated from data in the corresponding SOLO_L1_RPW-LFR-SBM1-BP1 parent file.

4.1.3.29.1 Filename

solo_L2_RPW-LFR-SBM1-BP1_[YYYYMMDD]_V[version].cdf

4.1.3.29.2 Expected data volume and time resolution

4.1.3.29.3 Global Attributes

4.1.3.29.4 Variables

4.1.3.30 SOLO_L2_RPW-LFR-SBM1-BP2 data product

The "SOLO_L2_RPW-LFR-SBM1-BP2" data product contains the calibrated LFR receiver Basic Parameters 2 data for SBM1 events.

The "SOLO_L2_RPW-LFR-SBM2-BP1" data are written in CDF format files. There is a single file per SBM1 event data downlinked on-ground. The file is generated from data in the corresponding SOLO_L1_RPW-LFR-SBM2-BP1 parent file.

4.1.3.30.1 Filename

solo_L1_RPW-LFR-SBM1-BP2_[YYYYMMDD]_V[version].cdf

4.1.3.30.2 Expected data volume and time resolution

4.1.3.30.3 Global Attributes

4.1.3.30.4 Variables

4.1.3.31 SOLO_L2_RPW-LFR-SBM2-CWF-E data product

The "SOLO_L2_RPW-LFR-SBM2-CWF-E" data product contains the calibrated LFR receiver Continuous Waveform data for SBM1 events for electrical components only.

The "SOLO_L2_RPW-LFR-SBM2-CWF-E" data are written in CDF format files. There is a single file per SBM2 event data downlinked on-ground. The file is generated from data in the corresponding SOLO_L1_RPW-LFR-SBM2-CWF parent file.

4.1.3.31.1 Filename

solo_L2_RPW-LFR-SBM2-CWF-E_[YYYYMMDD]_V[version].cdf

4.1.3.31.2 Expected data volume and time resolution

4.1.3.31.3 Global Attributes

4.1.3.31.4 Variables

4.1.3.32 SOLO_L2_RPW-LFR-SBM2-CWF-B data product

The "SOLO_L2_RPW-LFR-SBM2-CWF-B" data product contains the calibrated LFR receiver Continuous Waveform data for SBM1 events for magnetic components only.

The "SOLO_L2_RPW-LFR-SBM2-CWF-B" data are written in CDF format files. There is a single file per SBM2 event data downlinked on-ground. The file is generated from data in the corresponding SOLO_L1_RPW-LFR-SBM2-CWF parent file.



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4.1.3.32.1 Filename

solo_L2_RPW-LFR-SBM2-CWF-B_[YYYYMMDD]_V[version].cdf

4.1.3.32.2 Expected data volume and time resolution

4.1.3.32.3 Global Attributes

4.1.3.32.4 Variables

4.1.3.33 SOLO_L2_RPW-LFR-SBM2-BP1 data product

The "SOLO_L2_RPW-LFR-SBM2-BP1" data product contains the calibrated LFR receiver Basic Parameters 1 data for SBM2 events.

The "SOLO_L2_RPW-LFR-SBM2-BP1" data are written in CDF format files. There is a single file per SBM2 event data downlinked on-ground. The file is generated from data in the corresponding SOLO_L1_RPW-LFR-SBM2-BP1 parent file.

4.1.3.33.1 Filename

solo_L2_RPW-LFR-SBM2-BP1_[YYYYMMDD]_V[version].cdf

4.1.3.33.2 Expected data volume and time resolution

4.1.3.33.3 Global Attributes

4.1.3.33.4 Variables

4.1.3.34 SOLO_L2_RPW-LFR-SBM2-BP2 data product

The "SOLO_L2_RPW-LFR-SBM2-BP2" data product contains the calibrated LFR receiver Basic Parameters 1 data for SBM2 events.

The "SOLO_L2_RPW-LFR-SBM2-BP2" data are written in CDF format files. There is a single file per SBM2 event data downlinked on-ground. The file is generated from data in the corresponding SOLO_L1_RPW-LFR-SBM2-BP2 parent file.

4.1.3.34.1 Filename

solo_L2_RPW-LFR-SBM2-BP2_[YYYYMMDD]_V[version].cdf

4.1.3.34.2 Expected data volume and time resolution

4.1.3.34.3 Global Attributes

4.1.3.34.4 Variables

4.1.4 L3 - Higher level data products

Detailed description of the content and format of the derived data products.

4.1.5 CAL - Calibration data products

Detailed description of the content and format of the derived data products.



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4.1.5.1 SOLO_CAL_RPW-THR data product

The "SOLO_CAL_RPW-THR" data product contains the calibration tables for the TNR-HFR receiver.

The "SOLO_CAL_RPW-THR" data are written in CDF format files. A new file is generated each time new calibration tables are available for THR.

4.1.5.1.1 Filename

solo_CAL_RPW-THR_[YYYYMMDDThhmmss1-
YYYYMMDDThhmmss2]_V[version].cdf

4.1.5.1.2 Expected data volume and time resolution

4.1.5.1.3 Global Attributes

4.1.5.1.4 Variables

4.1.5.2 SOLO_CAL_RPW-TDS data product

The "SOLO_CAL_RPW-TDS" data product contains the calibration tables for the TDS receiver.

The "SOLO_CAL_RPW-TDS" data are written in CDF format files. A new file is generated each time new calibration tables are available for TDS.

4.1.5.2.1 Filename

solo_CAL_RPW-TDS_[YYYYMMDDThhmmss1-
YYYYMMDDThhmmss2]_V[version].cdf

4.1.5.2.2 Expected data volume and time resolution

4.1.5.2.3 Global Attributes

4.1.5.2.4 Variables

4.1.5.3 SOLO_CAL_RPW-LFR data product

The "SOLO_CAL_RPW-LFR" data product contains the calibration tables for the LFR receiver.

The "SOLO_CAL_RPW-LFR" data are written in CDF format files. A new file is generated each time new calibration tables are available for LFR.

4.1.5.3.1 Filename

solo_CAL_RPW-LFR_[YYYYMMDDThhmmss1-
YYYYMMDDThhmmss2]_V[version].cdf

4.1.5.3.2 Expected data volume and time resolution

4.1.5.3.3 Global Attributes

4.1.5.3.4 Variables



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4.1.5.4 SOLO_CAL_RPW-SCM data product

The "SOLO_CAL_RPW-SCM" data product contains the calibration tables for the SCM sensor.

The "SOLO_CAL_RPW-SCM" data are written in CDF format files. A new file is generated each time new calibration tables are available for SCM.

4.1.5.4.1 Filename

solo_CAL_RPW-SCM_[YYYYMMDDThhmmss1-
YYYYMMDDThhmmss2]_V[version].cdf

4.1.5.4.2 Expected data volume and time resolution

4.1.5.4.3 Global Attributes

4.1.5.4.4 Variables

4.1.5.5 SOLO_CAL_RPW-ANT-PA-HF data product

The "SOLO_CAL_RPW-ANT-PA-HF" data product contains the calibration tables for the RPW electrical antenna pre-amplifiers at high frequency.

The "SOLO_CAL_RPW-ANT-PA-HF" data are written in CDF format files. A new file is generated each time new calibration tables are available for the RPW electrical antenna pre-amplifiers at high frequency.

4.1.5.5.1 Filename

solo_CAL_RPW-ANT-PA-HF_[YYYYMMDDThhmmss1-
YYYYMMDDThhmmss2]_V[version].cdf

4.1.5.5.2 Expected data volume and time resolution

4.1.5.5.3 Global Attributes

4.1.5.5.4 Variables

4.1.5.6 SOLO_CAL_RPW-ANT-HF data product

The "SOLO_CAL_RPW-ANT-HF" data product contains the calibration tables for the RPW electrical antenna at high frequency.

The "SOLO_CAL_RPW-ANT-HF" data are written in CDF format files. A new file is generated each time new calibration tables are available for the RPW electrical antennas at high frequency.

4.1.5.6.1 Filename

solo_CAL_RPW-ANT-HF_[YYYYMMDDThhmmss1-
YYYYMMDDThhmmss2]_V[version].cdf

4.1.5.6.2 Expected data volume and time resolution

4.1.5.6.3 Global Attributes

4.1.5.6.4 Variables



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4.1.5.7 SOLO_CAL_RPW-BIA data product

The "SOLO_CAL_RPW-BIA" data product contains the calibration tables for the electrical measurements at low frequencies involving the RPW Bias unit.

The "SOLO_CAL_RPW-BIA" data are written in CDF format files. A new file is generated each time new calibration tables are available.

4.1.5.7.1 Filename

solo_CAL_RPW-BIA_[YYYYMMDDThhmmss1-
YYYYMMDDThhmmss2]_V[version].cdf

4.1.5.7.2 Expected data volume and time resolution

4.1.5.7.3 Global Attributes

4.1.5.7.4 Variables

4.1.6 ANC - Ancillary data products

Detailed description of the content and format of the derived data products.

No ancillary data product is generated for RPW.

5 APPENDIX - DATA PRODUCTS MATRIX

A table with a summary of the data products names and description has to be filled in here.

Product name	Description	Descriptor	Free_field	Level
SOLO_L0_RPW	Contains RPW TM unpacked and uncompressed data			L0
SOLO_L1_RPW- TNR-SURV	Contains RPW TNR L1 spectral data in normal and burst survey mode, time- tagged			L1



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SOLO_L1_RPW-HFR-SURV	Contains RPW HFR L1 spectral data in normal and burst survey mode, time-tagged			L1
SOLO_L1_RPW-TDS-SURV-RSWF	Contains RPW TDS L1 regular snapshot waveform data in normal and burst survey mode, time-tagged			L1
SOLO_L1_RPW-TDS-SURV-TSWF	Contains RPW TDS L1 triggered snapshot waveform data in normal and burst survey mode, time-tagged			L1
SOLO_L1_RPW-TDS-SURV-HIST1D	Contains RPW TDS L1 1D histogram data in normal and burst survey mode, time-tagged			L1
SOLO_L1_RPW-TDS-SURV-HIST2D	Contains RPW TDS L1 2D histogram data in normal and burst survey mode, time-tagged			L1
SOLO_L1_RPW-TDS-SURV-STAT	Contains RPW TDS L1 statistical data in normal and burst survey mode, time-tagged			L1



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SOLO_L1_RPW-TDS-SURV-MAMP	Contains RPW TDS L1 continuous HF signal maximum data in normal and burst survey mode, time-tagged			L1
SOLO_L1_RPW-TDS-LFM-RSWF	Contains RPW TDS L1 regular snapshot waveform data in low frequency mode, time-tagged			L1
SOLO_L1_RPW-TDS-LFM-CWF	Contains RPW TDS L1 continuous waveform data in low frequency mode, time-tagged			L1
SOLO_L1_RPW-TDS-LFM-SM	Contains RPW TDS L1 spectral matrix data in low frequency mode, time-tagged			L1
SOLO_L1_RPW-TDS-LFM-PSD	Contains RPW TDS L1 single power spectrum data in low frequency mode, time-tagged			L1
SOLO_L1_RPW-TDS-SBM1-RSWF	Contains RPW TDS L1 regular snapshot waveform data in SBM1 mode, time-tagged			L1



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SOLO_L1_RPW-TDS-SBM2-TSWF	Contains RPW TDS L1 triggered snapshot waveform data in SBM2 mode, time-tagged			L1
SOLO_L1_RPW-LFR-SURV-ASM	Contains RPW LFR L1 averaged spectral matrix data in normal and burst survey mode, time-tagged			L1
SOLO_L1_RPW-LFR-SURV-BP1	Contains RPW LFR L1 basic parameters 1 data in normal and burst survey mode, time-tagged			L1
SOLO_L1_RPW-LFR-SURV-BP2	Contains RPW LFR L1 basic parameters 2 data in normal and burst survey mode, time-tagged			L1
SOLO_L1_RPW-LFR-SURV-CWF	Contains RPW LFR L1 continuous waveform data in normal and burst survey mode, time-tagged			L1



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SOLO_L1_RPW-LFR-SURV-SWF	Contains RPW LFR L1 snapshot waveform data in normal and burst survey mode, time-tagged			L1
SOLO_L1_RPW-LFR-SBM1-CWF	Contains RPW LFR L1 continuous waveform data in SBM1 mode, time-tagged			L1
SOLO_L1_RPW-LFR-SBM1-BP1	Contains RPW LFR L1 basic parameters 1 data in SBM1 mode, time-tagged			L1
SOLO_L1_RPW-LFR-SBM1-BP2	Contains RPW LFR L1 basic parameters 2 data in SBM1 mode, time-tagged			L1
SOLO_L1_RPW-LFR-SBM2-CWF	Contains RPW LFR L1 continuous waveform data in SBM2 mode, time-tagged			L1
SOLO_L1_RPW-LFR-SBM2-BP1	Contains RPW LFR L1 basic parameters 1 data in SBM2 mode, time-tagged			L1



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SOLO_L1_RPW-LFR-SBM2-BP2	Contains RPW LFR L1 basic parameters 2 data in SBM2 mode, time-tagged			L1
SOLO_L1_RPW-BIA-SWEEP	Contains RPW BIAS L1 parameters from a given sweeping			L1
SOLO_L1_RPW-BIA-CURRENT	Contains RPW BIAS L1 intensity current values, time-tagged			L1
SOLO_L2_RPW-TNR-SURV	Contains RPW TNR L2 spectral data in normal and burst survey mode, time-tagged			L2
SOLO_L2_RPW-HFR-SURV	Contains RPW HFR L2 spectral data in normal and burst survey mode, time-tagged			L2
SOLO_L2_RPW-TDS-SURV-RSWF-E	Contains RPW TDS L2 regular snapshot waveform data – electrical components - in normal and burst survey mode, time-tagged			L2



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SOLO_L2_RPW-TDS-SURV-RSWF-B	Contains RPW TDS L2 regular snapshot waveform data – magnetic components - in normal and burst survey mode, time-tagged			L2
SOLO_L2_RPW-TDS-SURV-TSWF-E	Contains RPW TDS L2 triggered snapshot waveform data – electrical components - in normal and burst survey mode, time-tagged			L2
SOLO_L2_RPW-TDS-SURV-TSWF-B	Contains RPW TDS L2 triggered snapshot waveform data – magnetic components - in normal and burst survey mode, time-tagged			L2
SOLO_L2_RPW-TDS-SURV-HIST1D	Contains RPW TDS L2 1D histogram data in normal and burst survey mode, time-tagged			L2
SOLO_L2_RPW-TDS-SURV-HIST2D	Contains RPW TDS L2 2D histogram data in normal and burst survey mode, time-tagged			L2



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SOLO_L2_RPW-TDS-SURV-STAT	Contains RPW TDS L2 statistical data in normal and burst survey mode, time-tagged			L2
SOLO_L2_RPW-TDS-SURV-MAMP	Contains RPW TDS L2 continous HF signal maximum data in normal and burst survey mode, time-tagged			L2
SOLO_L2_RPW-TDS-LFM-RSWF-E	Contains RPW TDS L2 regular snapshot waveform data – electrical components - in low frequency mode, time-tagged			L2
SOLO_L2_RPW-TDS-LFM-RSWF-B	Contains RPW TDS L2 regular snapshot waveform data – magnetic components - in low frequency mode, time-tagged			L2



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SOLO_L2_RPW-TDS-LFM-CWF-E	Contains RPW TDS L2 continuous waveform data – electric components - in low frequency mode, time-tagged			L2
SOLO_L2_RPW-TDS-LFM-CWF-B	Contains RPW TDS L2 continuous waveform data – magnetic components - in low frequency mode, time-tagged			L2
SOLO_L2_RPW-TDS-LFM-PSDSM	Contains RPW TDS L2 single power spectrum and spectral matrix data in low frequency mode, time-tagged			L2
SOLO_L2_RPW-TDS-SBM1-RSWF-E	Contains RPW TDS L2 regular snapshot waveform data – electrical components - in SBM1 mode, time-tagged			L2



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SOLO_L2_RPW-TDS-SBM1-RSWF-B	Contains RPW TDS L2 regular snapshot waveform data – magnetic components - in SBM1 mode, time-tagged			L2
SOLO_L2_RPW-TDS-SBM2-TSWF-E	Contains RPW TDS L2 triggered snapshot waveform data – electrical components- in SBM2 mode, time-tagged			L2
SOLO_L2_RPW-TDS-SBM2-TSWF-B	Contains RPW TDS L2 triggered snapshot waveform data – magnetic components - in SBM2 mode, time-tagged			L2
SOLO_L2_RPW-LFR-SURV-ASM	Contains RPW LFR L2 averaged spectral matrix data in normal and burst survey mode, time-tagged			L2
SOLO_L2_RPW-LFR-SURV-BP1	Contains RPW LFR L2 basic parameters 1 data in normal and burst survey mode, time-tagged			L2



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SOLO_L2_RPW-LFR-SURV-BP2	Contains RPW LFR L2 basic parameters 2 data in normal and burst survey mode, time-tagged			L2
SOLO_L2_RPW-LFR-SURV-CWF-E	Contains RPW LFR L2 continuous waveform data – electrical components - in normal and burst survey mode, time-tagged			L2
SOLO_L2_RPW-LFR-SURV-CWF-B	Contains RPW LFR L2 continuous waveform data – magnetic components - in normal and burst survey mode, time-tagged			L2
SOLO_L2_RPW-LFR-SURV-SWF	Contains RPW LFR L2 snapshot waveform data in normal and burst survey mode, time-tagged			L2
SOLO_L2_RPW-LFR-SURV-SWF-B	Contains RPW LFR L2 snapshot waveform data – magnetic components - in normal and burst survey mode, time-tagged			L2



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SOLO_L2_RPW- LFR-SBM1-CWF -E	Contains RPW LFR L2 continuous waveform data - electrical components - in SBM1 mode, time-tagged			L2
SOLO_L2_RPW- LFR-SBM1-CWF -B	Contains RPW LFR L2 continuous waveform data – magnetic components - in SBM1 mode, time-tagged			L2
SOLO_L2_RPW- LFR-SBM1-BP1	Contains RPW LFR L2 basic parameters 1 data in SBM1 mode, time- tagged			L2
SOLO_L2_RPW- LFR-SBM1-BP2	Contains RPW LFR L2 basic parameters 2 data in SBM1 mode, time- tagged			L2
SOLO_L2_RPW- LFR-SBM2-CWF-E	Contains RPW LFR L2 continuous waveform data - electrical components - in SBM2 mode, time-tagged			L2



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SOLO_L2_RPW-LFR-SBM2-CWF -B	Contains RPW LFR L2 continuous waveform data – magnetic components - in SBM2 mode, time-tagged			L2
SOLO_L2_RPW-LFR-SBM2-BP1	Contains RPW LFR L2 basic parameters 1 data in SBM2 mode, time-tagged			L2
SOLO_L2_RPW-LFR-SBM2-BP2	Contains RPW LFR L2 basic parameters 2 data in SBM2 mode, time-tagged			L2

6 SAMPLE FILES

A sample of a valid file (header) per product shall be attached here.

7 LIST OF TBC/TBD/TBWs

TBC/TBD/TBW			
Reference/Page/Location	Description	Type	Status



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8 DISTRIBUTION LIST

<p>LISTS</p> <p>See Contents lists in “Baghera Web”: Project’s informations / Project’s actors / RPW_actors.xls and tab with the name of the list or NAMES below</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="width: 20px;"> </td><td>Tech_LESIA</td></tr> <tr><td> </td><td>Tech_MEB</td></tr> <tr><td> </td><td>Tech_RPW</td></tr> <tr><td> </td><td>[Lead-]Cols</td></tr> <tr><td> </td><td>Science-Cols</td></tr> </table>		Tech_LESIA		Tech_MEB		Tech_RPW		[Lead-]Cols		Science-Cols
	Tech_LESIA										
	Tech_MEB										
	Tech_RPW										
	[Lead-]Cols										
	Science-Cols										

INTERNAL

LESIA CNRS		

LESIA CNRS		

EXTERNAL (To modify if necessary)

CNES		C. FIACHETTI
		C. LAFFAYE
		R.LLORCA-CEJUDO
		E.LOURME
		M-O. MARCHE
		E.GUILHEM
		J.PANH
	B.PONTET	
IRFU		L. BYLANDER
		C.CULLY
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		SE.JANSSON
		A.VAIVADS
LPC2E		P. FERGEAU
		G. JANNET
		T.DUDOK de WIT
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SSL		S.BALE

Asi/CSRC		J.BRINEK
		P.HELLINGER
		D.HERCIK
		P.TRAVNICEK
IAP		J.BASE
		J. CHUM
		I. KOLMASOVA
		O.SANTOLIK
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	L.UHLIR	
IWF		G.LAKY
		T.OSWALD
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		H. RUCKER
		M.SAMPL
	M. STELLER	
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		A. JEANDET
		P.LEROY
		M.MORLOT