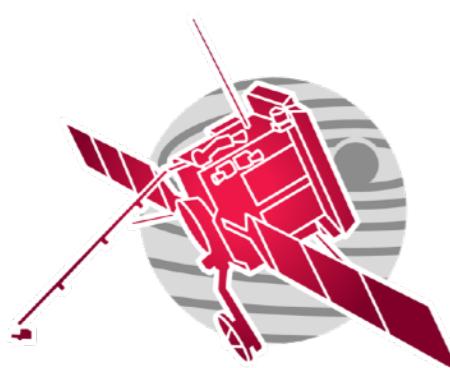# ROC Validation Activities

Summary report

Milestones

- RCS integration   Feb-Oct. 2019

- ROC-MOC DDS/GFTS implementation   May-July 2019

- **SVT1-A test**   **2 May 2019**

- **E2E-1 test**   **June 2019**

- RCS "ready-for-flight" version release   Oct. 2019

- ROC V4 pre-release ("RSS4")   Oct 2019

- **SVT1-B test**   **9 Aug. 2019**

- **ROC Validation Campaign #4 (RSS4VC)**   **Oct.-Nov. 2019**

- ROC "Acceptance Key point"   Jan. 2019

- ROC V4 final release ("RSS4")   Jan. 2020

System Validation Tests (SVT1a/b)

- **Objectives**

  - Validation of MOC-Plateform/Payload interface (RPW TC sequences run on PFM)

- **Known limitations**

  - Software support not fully operational for RPW TC sequences generation and submission

- **Results**

  - Successfully run with minor issues (see ROC-TST-VAL-RPT-00109-LES_Iss01_Rev00(SVT1A_Report) and ROC-TST-VAL-RPT-00110-LES_Iss01_Rev00(SVT1B_Report))

- **Objectives**

  - Validation of Instrument Operation Requests (IOR) mechanism (ROC → SOC → MOC)

- **Known limitations**

  - Software support not fully operational for IOR generation and submission

  - Not full E2E test (no downlink products, e.g., raw telemetry data)

  - Only performed on 2 weeks of operations (STP planning level)

- **Results**

  - Successfully run with minor issues (see ROC-TST-SFT-RPT-00067-LES - LES_Iss01_Rev00(E2E-0_Report) and https://issues.cosmos.esa.int/solarorbiterwiki/display/SOSP/SOC+System+Test+Documentation)

ROC V4 validation tests (RSS4VC)

- **Objectives**

  - Validation of ROC software system (V4)

- **Known limitations**

  - Partial validation with limited test coverage

  - "Stand-alone" tests (no full E2E test, no rehearsal, limited set of test data)

  - SOC and/or MOC Teams not involved

- **Results**

  - Most of ROC critical functions have been successfully tested

  - Some functions required SOC/MOC to be formally validated

  - Some implemented functions were not validated (no test case or test data)

  - See ROC-TST-VAL-PLN-00111-LES_Iss01_Rev02-RSS4VC_Test_Report