



Visiona Tecnologia Espacial
Estrada Dr. Altino Bondensan 500,
Bloco 2, CEP: 12247-016
Tel.: (55) 12 2138 5800
Fax: (55) 12 2138 5802

SGDC-1

IN-ORBIT HEALTH REPORT

March, 2025



Autenticado com senha por SEBASTIÃO DO NASCIMENTO NETO - 05/06/2025 às 15:35:07.
Documento Nº: 785587-3182 - consulta à autenticidade em
<https://extranet.telebras.com.br/sigaex/public/app/autenticar?n=785587-3182>



TLBAUT202509101A

1 TABLE OF CONTENTS

2 SUMMARY.....	3
3 PAYLOAD.....	3
4 BUS SUBSYSTEMS	3
4.1 Thermal.....	3
4.2 Station keeping.....	3
4.3 Power.....	4
4.4 Telemetry Command and Ranging	4
4.5 On board processors	4
4.6 Ground operations	4
5 GENERAL.....	4
6 CONCLUSIONS	5



2 SUMMARY

This report refers to the period after the interval covered in the previous report, dated March 15th, 2024.

Accordingly, the period covered in this report begins on March 16th, 2024, and ends on March 15th, 2025.

During this period the spacecraft has performed in accordance with specifications without experiencing any major anomalies or loss of unit.

3 PAYLOAD

The payload configuration is the nominal one during this period covered by this report.

Payload performances are as expected.

4 BUS SUBSYSTEMS

4.1 THERMAL

No out of limits has been triggered on the satellite on the thermal subsystem.

4.2 STATION KEEPING

Number of maneuvers performed in NM between March 16th, 2024, and March 15th, 2025:

South maneuvers:	13
North maneuvers:	13
West maneuvers:	53
East maneuvers:	0

SGDC-1 mass at the beginning of the analyzed period was 3128.75 kg.

- Dry + He:	2459.89 kg (16/03/2024)
- Oxidizer:	420.69 kg
- Fuel:	248.17 kg

At the end of the analyzed period, the mass was 3065.31kg:



VIS-SGDC-ENG-ANA-0013



- Dry + He: 2459.89 kg (15/03/2025)
- Oxidizer: 381.21 kg
- Fuel: 224.21kg

The total propellant spent during this period was **63.44 kg**.

No abnormal behavior that may generate unexpected propellant consumption has been noticed during maneuvers. Therefore, the updated End of Lifetime prediction is around May 2035.

4.3 POWER

Power subsystem behavior is as expected.

Battery performances during eclipses' season is nominal ever since.

Solar array performance is nominal.

Power budget provided at beginning of life is still applicable as no anomaly occurred on batteries or solar arrays.

4.4 TELEMETRY COMMAND AND RANGING

TCR subsystem behavior is as expected.

4.5 ON BOARD PROCESSORS

No patch loaded on board: no software modification in-flight.

Onboard processors behavior is as expected (no anomaly reported).

4.6 GROUND OPERATIONS

Ground operations were performed on regular basis, without any issues.

5 GENERAL

Both Brasília Control Center and Rio de Janeiro Control Center were operating nominally since successful migration performed from the temporary to the final facilities and formally accepted by October 2020.



VIS-SGDC-ENG-ANA-0013



6 CONCLUSIONS

Based on the information presented and considering the last Health Report (attached) Visiona considers that the satellite is fully operational and with all parameters as expected.



Prepared by:

Wilson Yamaguti

Approved by:

Mario Quintino



TLBAUT202509101A