



VISIONA

Tecnologia Espacial

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

May, 2020

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 May 31st 2019.

Accordingly, the period covered in this report begins on June 1st, 2019 and ends on May 8th, 2020.

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 15th 2019 and March 15th 2020:

South maneuvers:	11
North maneuvers:	15
West maneuvers:	53
East maneuvers:	2

No abnormal behavior that may generate unexpected propellant consumption has been noticed during maneuvers.

Therefore, the current End of Lifetime prediction is March 2035.

 SGDC1 MISSION ANALYSIS Health Sta	TAS - SGDC1 MISSION ANALYSIS Health Status 15 MARCH 2019 to 15 MARCH 2020
---	--

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

During the period the Brasília and Rio de Janeiro Control Centers were successfully migrated from the temporary to the final facilities.

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.

 SGDC-1 In Orbit Health Report - June 2019	SGDC-1 In Orbit Health Report - June 2019
---	---

Prepared by:



Ricardo Contaifer

Approved by:



Mario Quintino