Spacecraft Environment Interaction

R7004R

SPENVIS Report

Analysis of the Cluster-II FM-8 (Tango) Mission

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Abstract

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Contents

1 Introduction

In this Report the Space Radiation Environment in the Orbit of the ESA Cluster-II FM-8 Tango Satelliteis is analysed. bla.

2 Mission Definition

The Mission

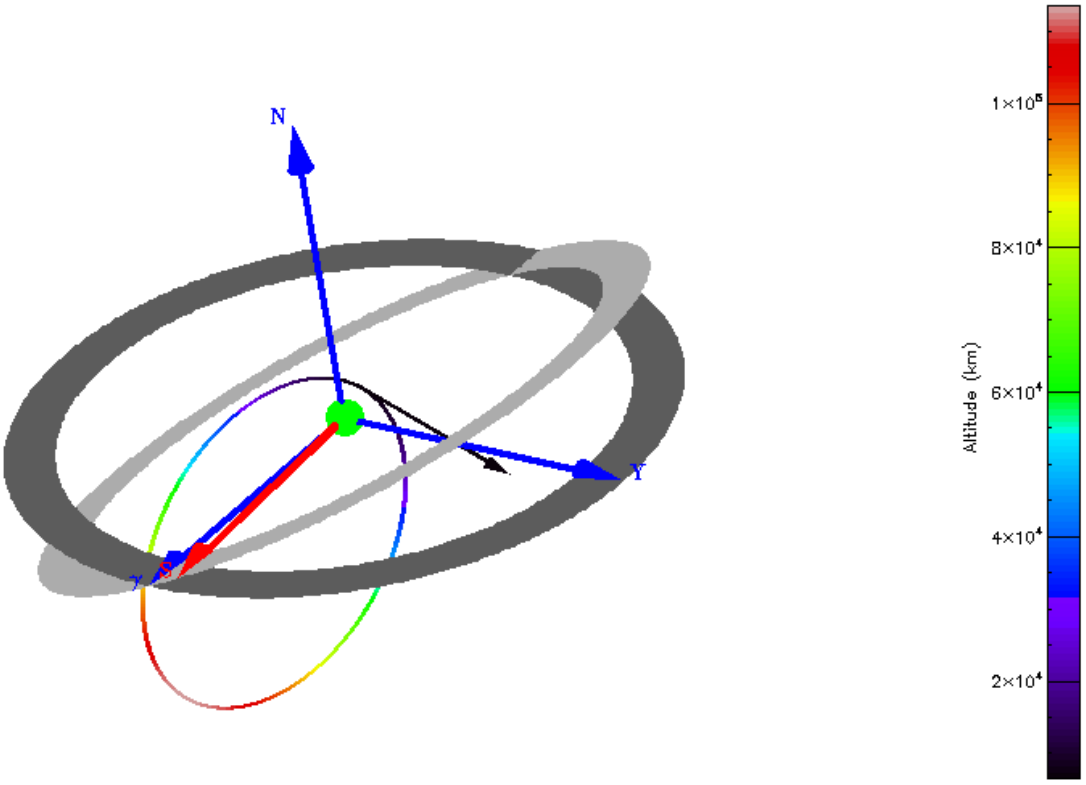

Figure 1: One Orbit of the Tango Satellite, color bar shows the altitude

3 Space Environment

3.1 Overview

3.2 Radiation Environment

4 Numerical Simulations

4.1 Environmental flux

4.2 Lifetime and Performance Degradation

4.3 Total Dose and Shielding

4.4 Singel Event Upsets

4.5 Linear Energy Transfer (LET) Spectrum

4.6 Cross Section and Components Characteristics

4.7 SEU Estimation

5 Discussion

References

Appendix

Orbital Parameters of Cluster-II FM8 Tango

```
CLUSTER II-FM8 (TANGO)
1 26464U 00045B 16087.81656212 .00000382 00000-0 00000+0 0 9996
2 26464 131.5572 328.3783 5181518 141.3516 0.4910 0.44219885 51441
```

Table 1 shows the parameters extracted from the TLE data in a more readable format.

Table 1: Cluster-II Tango Parameters extracted of TLE set

Parameter	**Value**
Satellite Common Name	CLUSTER II-FM8 TANGO
Satellite Number	26464
Elset Classification	U
International Designator	00
Launch Number of the Year	045
Epoch Year	16
Epoch	87.81656212
BSTAR Drag Term	0.00000382
Inclination (deg)	131.5572
RAAN (deg)	328.3782
Eccentricity	0.5181518
Argument of Perigee (deg)	141.3516
Mean Anomaly (deg)	0.4910
Mean Motion (rev/day)	0.44219885
Rev number at epoch	5144