

GRAS SIMULATION SUMMARY

Order number: 123456789

Simulace zařízení UIEHTGUWEIFGHS298

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1. SCOPE OF THE SIMULATION

This document presents the results of computer simulations for radiation analysis performed using a local copy of GRAS (version 5.0.1) in combination with Geant4 version 10.07 (patch 2) for L²SIM project 123456789.

The simulation was performed for the following analyzed volumes:

- TPS BDS-CISHAB-MDL-0002-ELV214 v007-ELV214 v6-NA1-FP011-FP10telo001-DETECTOR MATDEF Silicon PV
- TPS_BDS-CISHAB-MDL-0002-ELV214_v007-ELV214_v6-U1-AD585-DETECTOR_MATDEF_Silicon_PV
- TPS_BDS-CISHAB-MDL-0002-ELV214_v007-ELV214_v6-VT1-LCC3-DETECTOR_MATDEF_Silicon_PV
- TPS BDS-CISHAB-MDL-0002-ELV214 v007-ELV214 v6-NA1-FP011-FP10telo001-DETECTOR MATDEF Silicon PV
- TPS BDS-CISHAB-MDL-0002-ELV214 v007-ELV214 v6-U1-AD585-DETECTOR MATDEF Silicon PV
- TPS_BDS-CISHAB-MDL-0002-ELV214_v007-ELV214_v6-VT1-LCC3-DETECTOR_MATDEF_Silicon_PV
- TPS_BDS-CISHAB-MDL-0002-ELV214_v007-ELV214_v6-NA1-FP011-FP10telo001-DETECTOR_MATDEF_Silicon_PV
- TPS BDS-CISHAB-MDL-0002-ELV214 v007-ELV214 v6-U1-AD585-DETECTOR MATDEF Silicon PV
- TPS_BDS-CISHAB-MDL-0002-ELV214_v007-ELV214_v6-VT1-LCC3-DETECTOR_MATDEF_Silicon_PV

Table [1.1] shows parts of the spectrum used in the simulation.

Table 1.1: Parts of the spectrum used in the simulation

PART OF THE SPECTRUM	NUMBER OF EVENTS	PHYSICAL VOLUME
Solar Proton	60000	NA1-FP011
Trapped Electron	2e+05	NA1-FP011
Trapped Proton	60000	NA1-FP011
Solar Proton	60000	U1AD585
Trapped Electron	2e+05	U1AD585
Trapped Proton	60000	U1AD585
Solar Proton	60000	VT1LCC3
Trapped Electron	2e+05	VT1LCC3
Trapped Proton	60000	VT1LCC3

Performed analysis is summarized in table [1.2].

Table 1.2: Performed analysis parts of the spectrum used in the simulation

ANALYSIS MODULE	UNIT
DOSE	MeV
FLUENCE	counts/cm2
LET	MeV/cm
NIEL	MeV/g