

NEWSPACE MARKET · COMPANY PROFILE



Space Radiation Services

United States · founded 2022 · spaceradiationservices.com

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PRODUCTS

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SERVICES

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as of 20 August 2026



Space Radiation Services

Space Radiation Services was founded in 2022 by Dr. Matthew Gill, a nuclear engineer with a PhD and extensive prior experience leading radiation testing and analysis for over 200 systems at Apollo Fusion (electric propulsion startup acquired by Astra). The company is headquartered in San Francisco, California, and supports dozens of customers across three continents — from component and sub-system suppliers to full satellite manufacturers and constellation providers, including Maxar, Airbus OneWeb Satellites, York Space Systems, Astroscale, LeoStella, Spaceflight, and the Air Force Research Lab. The founding philosophy is that radiation testing should be no more difficult than other environmental testing. Space Radiation Services offers a flexible approach that balances cost, schedule, and risk, tailored to each customer's unique programme requirements — whether that means following strict MIL-STD or ECSS standards for heritage programs or developing novel approaches for New Space ventures. The company's core service areas cover Single Event Effects (SEE), Total Ionizing Dose (TID), and Displacement Damage (DD). Services include expert advisory and training, BOM scrubbing to identify radiation-tolerant COTS alternatives with public radiation data, radiation test plan and procedure development, on-site test execution and support, shielding analysis, orbital environment modelling for LEO/MEO/GEO and deep space, mitigation guidance (ECC, watchdog timers, latch-up detection), and professional radiation test reports. The company also offers a free suite of online radiation modelling tools (TID, SEE, atomic oxygen, internal charging, and an AI-powered Space Radiation GPT chatbot) and a sister platform (spacereliability.com) focused on satellite reliability.

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SERVICES

Services

Engineering Consulting and Research for Space Systems Expert engineering consulting and research focused on radiation testing, analysis, and design for space systems, supporting clients from component suppliers to satellite manufacturers.	Radiation Simulation and Mitigation Guidance Running radiation simulations to estimate on-orbit rates of soft errors, lifetime, and shielding requirements, and providing guidance on mitigation methods.
Radiation Test Plan Development and Support Developing comprehensive test plans and procedures for radiation tests, and providing support for test preparation and execution, including on-site assistance.	Radiation Testing and Analysis Services Comprehensive radiation testing and analysis services tailored to client needs, including expert advice, product analysis, and various levels of hardware evaluation.

Training Packages on Radiation Effects and Testing

Providing training packages on radiation effects and testing to educate client teams and enhance their understanding and capabilities in this specialized area.

Product catalogue

SPACE RADIATION SERVICES

Radiation testing and analysis services

Space Radiation Services offers engineering consulting and research focused on radiation testing, analysis, and design for space systems, ensuring hardware survivability in space e

Test type

Total Ionizing Dose (TID)

Source

Co-60 gamma radiation

Standards

MIL-STD-883, ESCC

Environment

LEO, MEO, GEO, deep space simulation

price on request

SPACE RADIATION SERVICES

Simple Space Radiation Tools (TID / SEE / AO / Charging Models)

Free web-based visualization tools for orbital radiation environment analysis: TID, single-event effect, atomic oxygen, and internal charging heatmaps.

TID tool inputs

Shielding thickness, survival TID tolerance, max mission lifetime (solve for any one given

TID tool orbit range

Circular orbits from LEO to GEO and lunar orbits

SEE tool method

Petersen Figure of Merit (FOM), 1998

SEE tool inputs

Proton test data (limiting cross-section) or heavy-ion test data (Weibull LET fit paramete

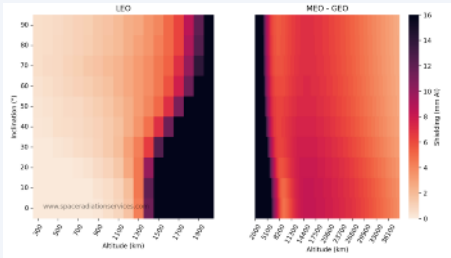
Additional models

Atomic oxygen (AO) erosion model, internal/deep-dielectric charging model

Access

Free, web-based, no account required

price on request



Contact Space Radiation Services

Open the company profile on NewSpace Market to see full specifications and datasheets, and to send a request for quotation that reaches the manufacturer directly.

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<https://www.spaceradiationservices.com>

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