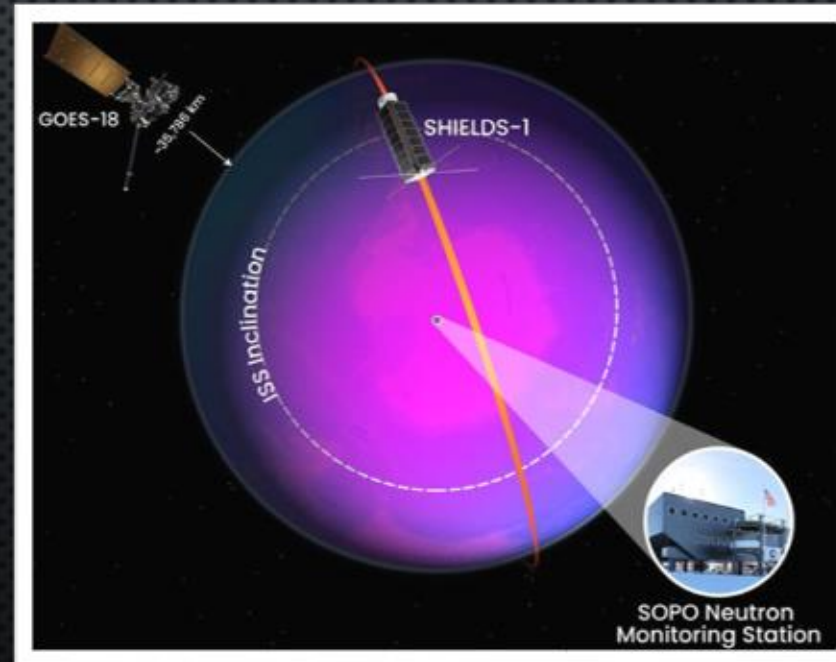
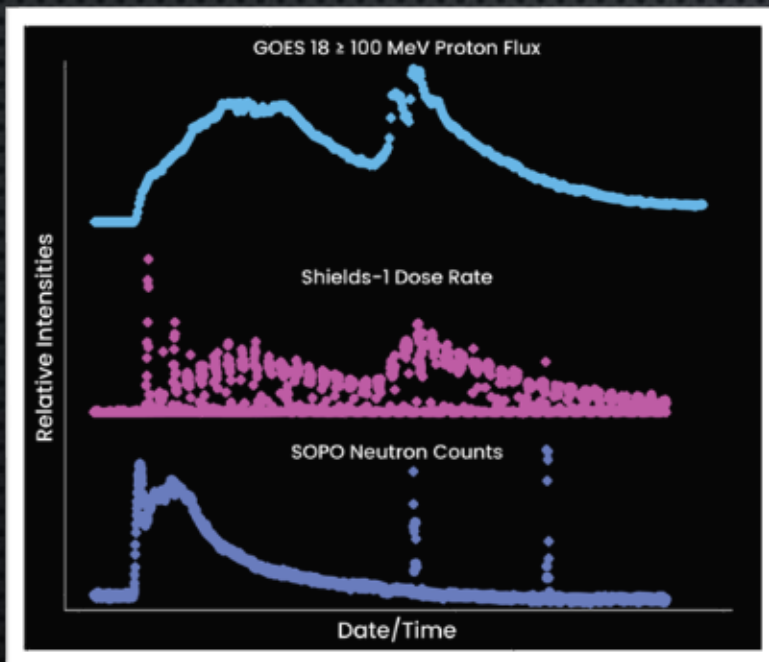


SHIELDS-1: SMALL SATELLITE, MASSIVE IMPACT

HOW SHIELDS-1 REDEFINED SPACE WEATHER SCIENCE



Shields-1 significantly advanced understanding of extreme solar radiation while directly shaping future spacecraft shielding designs. Over seven years, the CubeSat delivered high-resolution measurements of energetic particles—capturing a major 2025 event, filling in gaps missed by some larger systems—and produced critical insights into radiation exposure in polar orbit. Its technology and findings not only deepened space weather science but also informed next-generation mission hardware, proving that small satellites can drive outsized scientific and engineering breakthroughs.



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