



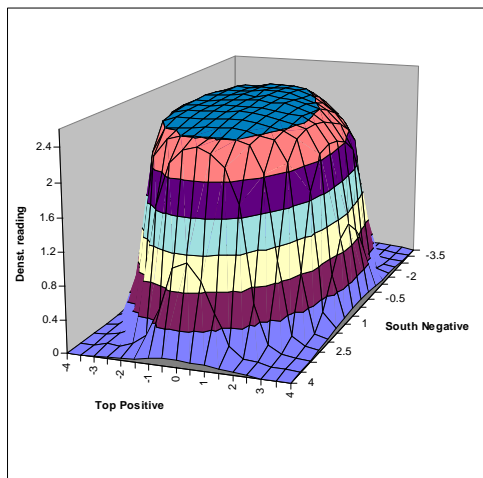
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The 76" Cyclotron of the Crocker Nuclear Laboratory (CNL) at the University of California at Davis (UCD) provides an excellent proton energy range for simulation of fluences (particles/cm²) seen by materials and microelectronic devices behind spacecraft's shielding. The proton energy range spans from 1.2MeV to 68MeV. The average particle beam flux provided, ranges from tens of particles/(cm²×s) up to a very large flux of approximately 10¹¹ particles/(cm²×s).

Beams of deuterons and ⁴He (alpha-particles) up to 45 and 90-MeV respectively can be provided if requested.

CYCLOTRON PARTICLE BEAM ENERGIES AND MAX INTENSITIES:

PARTICLE BEAM	ENERGIES (MeV)	Max I (micro Amps)
PROTON	1.25 to 68	30
DEUTERON (² H)	15 to 45	40
ALPHA (⁴ HE)	5 to 90	40
HELIUM (³ He)	6 to 130	1