Example questions

- (SRIM) – how much aluminum shielding would be required to stop a 3300 MeV ^{129}Xe ion? What about the same energy, but N, Ne, and Ar ions? What are the implications for shielding in general?
- Roughly how much aluminum shielding would be required to reduce the heavy-ion-induced upset rate by an order of magnitude (rel. to 100 mils Al)?
- Given a 64kbit memory array with an experimentally measured cross section of 2.3 x 10^{-9} cm^2/bit, approximate the the number of upsets expected over a 1-year mission (assume transistor size of 200 nm x 200 nm x 500 nm)
- Approximately what proportion of these upsets are due to ions with $Z > 26$?
- Could we substitute one larger RPP instead of 64k small RPPs to get the same upset rate with CRÈME? Why or why not?