

Among the radioactive products emitted in the 1986 Chernobyl reactor accident were ^{131}I ($t_{1/2} = 8.0$ days) and ^{137}Cs ($t_{1/2} = 30$ years). There are about five times as many ^{137}Cs atoms produced in fission.

- a) Which isotope contributes the greater activity to the radiation cloud?
Assume the reactor has been operating continuously for several days before the radiation is released.
- b) How long after the original incident does it take for the two activities to become equal?