

^{135}Cs

In “Characteristics of the fission product Cs^{135} ” the first measurement of ^{135}Cs by Sugarman was reported in 1949 ([1949Su03](#)). Samples of ^{135}Xe were prepared from fission fragments from the Los Alamos homogenous pile. After the decay of the xenon activity, β -ray spectra were measured following chemical separation. “Assignment of the new Cs activity to Cs^{135} is very probable from the way in which it was prepared. This assignment is constant with the timing of the experiments in which the He gas-sweeping of the pile was retained for Xe adsorption after discarding the first half-hour sweeping to eliminate active gases from short-lived halogens. The only Cs isotopes which should be present in the decay products of the gas are Cs^{133} arising from the decay of Xe^{133} and Cs^{135} from Xe^{135} . Since Cs^{133} is a naturally occurring stable isotope, assignment of the activity to Cs^{133} would mean that the expected mode of decay would be isomeric transition. The shape of the Al absorption curve of the Cs activity is characteristic of a β^- spectrum rather than that of a conversion electron spectrum. The mass assignment of 135 appears most probable.”

Adapted from reference ([2012Ma48](#))

[1949Su03](#) N. Sugarman, Phys. Rev. **75**, 1473 (1949).

[2012Ma48](#) E. May and M. Thoennessen, At. Data Nucl. Data Tables **98**, 960 (2012).

Please cite this abstract as: “FRIB Nuclear Data Group, *Discovery of Nuclides Project*, Isotope Database, doi:[10.11578/frib/2279152](https://doi.org/10.11578/frib/2279152)”