Abstract (Recent sediment dating and interpretation in estuaries by means of the excess 210Pb technique): The determination of concentrations of excess 210Pb in sediments from cores taken in western Cantabrian estuaries has provided estimations on the age of the sediments, sedimentation rates and temporal evolution for the last decades. Complementarily, an analysis of the 137Cs activity and a characterization of the sediment samples have been carried out. The radiometric anomalies found provide information relevant to understand the evolution of the sedimentation and the potential causes. Particularly, there is a significant event characterized by an abnormally low 210Pb activity that corresponds to a great sedimentation rate, as well as a higher proportion of quartz grains and fragments of gastropods and bivalves related to a greater energy episode in the system. Sedimentation rates obtained (0.5-4 mm a\(^{-1}\)) are comparable to those of other estuaries in northern Spain.