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study of the Cs-137 detections at RN43 station

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This work is the result of a joint collaboration between the Italian and the Mauritanian National Data Centers. Radionuclide station RN43 in Mauritania was established in Nouakchott on 6 November 2006. The historical analysis of the occurrence of relevant radionuclides at RN43 over the past ten years showed that the main contributor was Cs-137, causing several level 3 and level 4. A descriptive statistical analysis of the Cs-137 occurrence was performed and two types of parametric process control methods were applied: the “Shewhart Control Chart” and the “Exponentially Weighted Moving Average (EWMA) Control Chart”. The results of both methods were then analyzed in order to reveal seasonality, possible sources of Cs-137 and correlation with atmospheric phenomena.

Promotional text

Desert wind is blowing; Cesium fro the desert to the Ocean

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