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## Impact parameter description of the nucleus and the incoherent photoproduction of vector mesons in the color dipole approach

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We study the exclusive photoproduction of heavy vector mesons off nuclear targets using the color dipole model within the Glauber-Gribov formalism. We obtained the impact-parameter-dependent cross sections for both coherent and incoherent cases, with spatial correlations among nucleons to account for fluctuations in their positions. This approach aims to provide a more accurate description of the experimental data. Our results are compared to PbPb photoproduction measurements from ALICE, showing good agreement for the coherent case while highlighting the need for additional nuclear effects in the incoherent case.

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