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Upgrades to OEDGE/DIVIMP for modeling the DIII-D W-rings experiments¹ J.D. ELDER, P.C. STANGEBY, U. Toronto, R. DING, J. GUTERL, ORAU — Several upgrades have recently been made to the OEDGE/DIVIMP interpretive code package to facilitate modeling of the tungsten rings experiments on DIII-D. OEDGE/DIVIMP can now import charge state resolved impurity fluxes and impact energies of an impurity from a previous run in order to more accurately simulate the source of a second impurity (e.g., C sputtering W). In addition, OEDGE now calculates the plasma potential based on integrating the parallel electric field calculated from Ohms law. The radial and poloidal electric fields are calculated along with the resulting ExB drifts which are applied to the impurity transport. Finally, a new model for prompt redeposition has been implemented in OEDGE/DIVIMP and in addition, OEDGE/DIVIMP has been coupled to the 3D ERO code to model near target impurity losses due to the sheath electric field. Initial results applying these features to modeling measurements from the tungsten rings experiment are presented.

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