

HOT STRIPES RATHER THAN HOT SPOTS IN CATAclySMIC BINARIES:
2 - D HYDRODYNAMIC MODELS

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ABSTRACT. Two-dimensional hydrodynamic models of the collision region between the stream and the disk in a cataclysmic binary are presented. The adiabatic collision results in significant mass loss from the system and produces large turbulent regions in outer parts of the disk. Radiative cooling of the collision region leads to a semi-continuous injection of mass into the disk in the form of dense blobs of gas. In both cases the hot regions obtained as a result of the collision are over 1/6 of the circumference of the disk long and almost 40% of its radius deep, deserving to be renamed 'hot stripes'.

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