Circulation in Contact Binary Systems

D. Q. ZHOU

Department of Geophysics Peking University Beijing, China

and

K. C. LEUNG

Behlen Observatory University of Nebraska Lincoln, NE USA

It has been proven that circulation must exist in the envelope of contact binary systems according to the baroclinic structure in the contact binary atmosphere (Zhou and Leung 1990). For the sake of simplification, the Coriolis effect will be neglected in our numerical calculation for the formation of this circulation so that it can be simplified into a two-dimensional axisymmetric circulation. In this paper, we have produced the circulation by means of numerical simulation. We also put forth a discussion on boundary and initial conditions.

Zhou, D. Q. and Leung, K. C. 1990, ApJ, 355, 271.

Y. Kondo et al. (eds.), Evolutionary Processes in Interacting Binary Stars, 391. © 1992 IAU. Printed in the Netherlands.

391