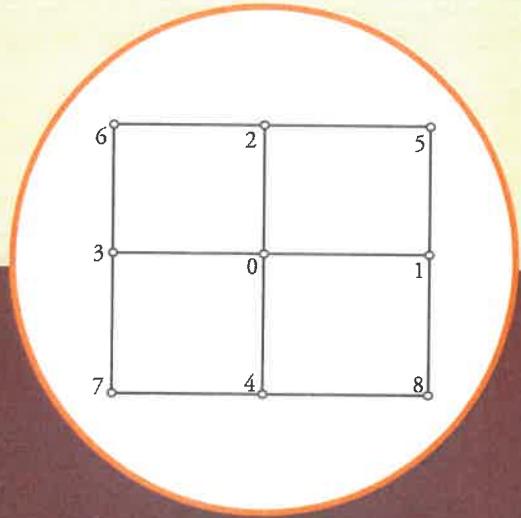


NUMERICAL METHODS FOR ATMOSPHERIC AND OCEANIC SCIENCES



$$J_o^{++} = \frac{(\psi_1 - \psi_3)[(\xi + f)_2 - (\xi + f)_4] - (\psi_2 - \psi_4)[(\xi + f)_1 - (\xi + f)_3]}{4d^2}$$

$$J_o^{+v} = \frac{\psi_1[(\xi + f)_5 - (\xi + f)_8] - \psi_3[(\xi + f)_6 - (\xi + f)_7] - \psi_2[(\xi + f)_5 - (\xi + f)_6] + \psi_4[(\xi + f)_8 - (\xi + f)_7]}{4d^2}$$

$$J_o^{v+} = \frac{(\xi + f)_2(\psi_5 - \psi_6) - (\xi + f)_4(\psi_8 - \psi_7) - (\xi + f)_1(\psi_5 - \psi_8) + (\xi + f)_3(\psi_6 - \psi_7)}{4d^2}$$

A. CHANDRASEKAR