













$$(\theta_z - \sigma_{\theta-}) = \arctan \frac{y_k - \sigma_y}{x_k + \sigma_x}, \quad (\theta_z + \sigma_{\theta+}) = \arctan \frac{y_k + \sigma_y}{x_k - \sigma_x} \quad (1)$$

$$\sigma_k = (\sigma_{\theta+} + \sigma_{\theta-}) = \arctan \frac{y_k + \sigma_y}{x_k - \sigma_x} - \arctan \frac{y_k - \sigma_y}{x_k + \sigma_x} \quad (2)$$