$$b_{BM}(x_S, y_S, R_S, R_M) := R_M \cdot \operatorname{acos}\left[\frac{\overline{x_S} - \frac{\overline{x_S}\cdot\left(\overline{R_M} + \overline{R_S}\right)^2 - \overline{y_S}\cdot\left(\overline{R_M} + \overline{R_S}\right)\cdot\sqrt{\left(\overline{x_S}\right)^2 + \left(\overline{y_S}\right)^2 - \left(\overline{R_M} + \overline{R_S}\right)^2}}{\left(\overline{x_S}\right)^2 + \left(\overline{y_S}\right)^2}}{\sqrt{\left[\left|x_S - \frac{x_S\cdot\left(R_M + R_S\right)^2 - y_S\cdot\left(R_M + R_S\right)\cdot\sqrt{x_S^2 - \left(R_M + R_S\right)^2 + y_S^2}}{x_S^2 + y_S^2}\right|\right]^2 + \left[\left|y_S - \sqrt{\left(R_M + R_S\right)^2 - \frac{\left[x_S\cdot\left(R_M + R_S\right)^2 - y_S\cdot\left(R_M + R_S\right)\cdot\sqrt{x_S^2 - \left(R_M + R_S\right)^2 + y_S^2}\right]^2}{\left(x_S^2 + y_S^2\right)^2}}\right|\right]^2}}\right]$$

$\overline{x_S}$ x_S