

X-factor and the Spatial Response Functions of QuikSCAT and RapidScat

$$P_r = X\sigma^0$$

$$X = \frac{P_t^2}{(4\pi)^3} \int SRF(x, y) dA$$

$$SRF(x, y) = \frac{G(x, y)^2 F(x, y)}{R(x, y)^4}$$

- Calculation of X-factor is computationally intensive
- Pre-computed and stored as table which is interpolated
- New tables needed for RapidSCAT
 - Use with QuikSCAT processing code
 - Variable ISS orbit.

