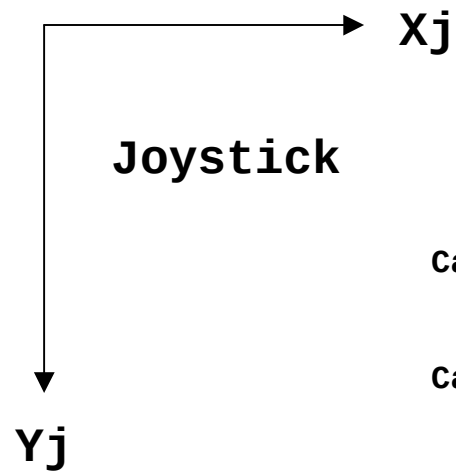
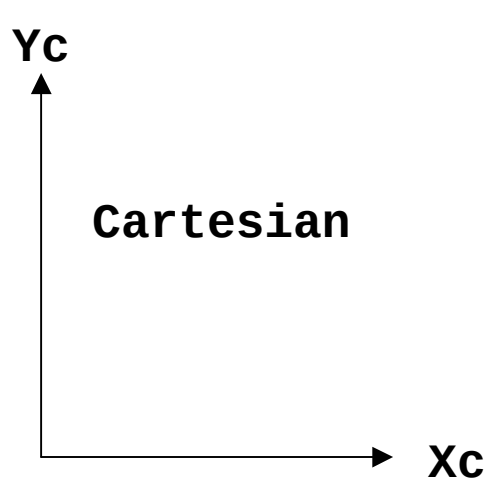


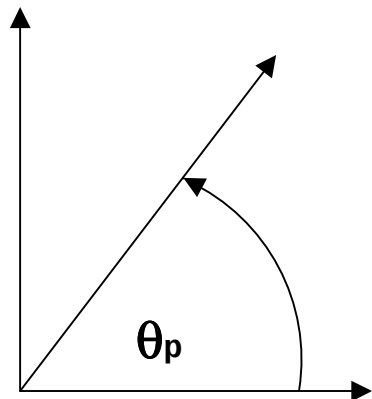


Cartesian to Polar: $\theta_p = \text{atan2}(Y_c, X_c);$

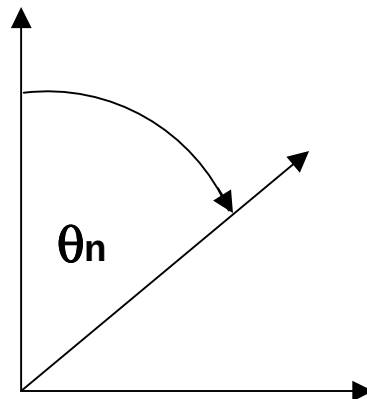
Cartesian to Nav: $\theta_n = \text{atan2}(X_c, Y_c);$

Joystick to Polar: $\theta_p = \text{atan2}(-Y_j, X_j);$

Joystick to Nav: $\theta_n = \text{atan2}(X_j, -Y_j);$



Polar



Navigation/Surveying

WARNING TO Excel USERS:

I am using the "standard" definition of atan2 here

<http://en.wikipedia.org/wiki/Atan2#Definition>