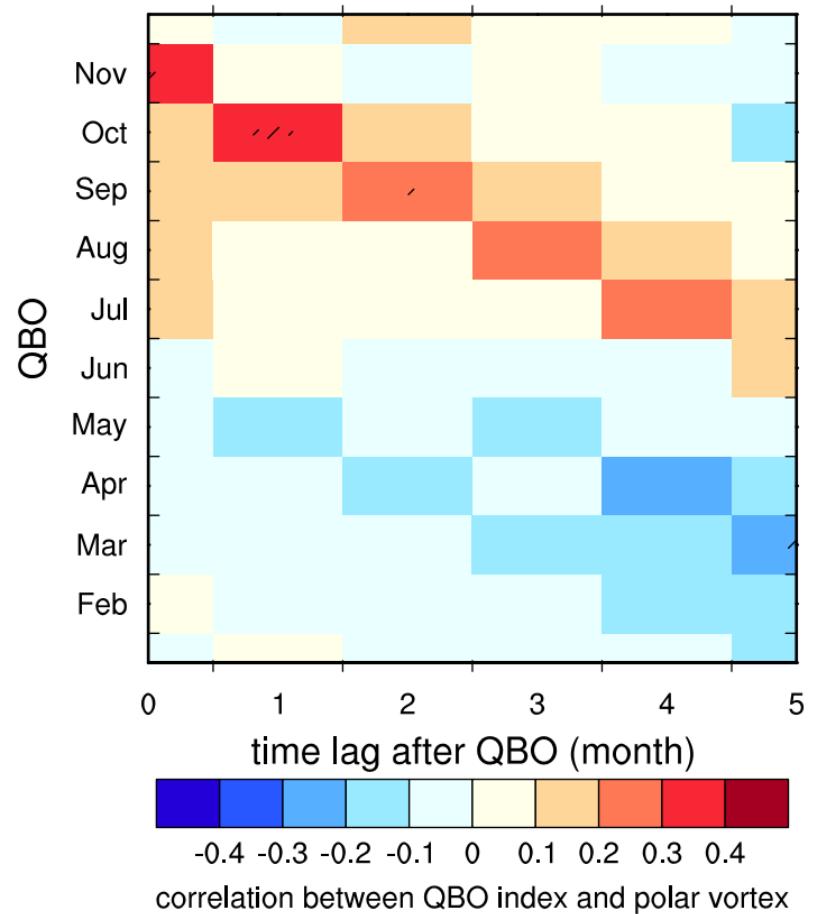
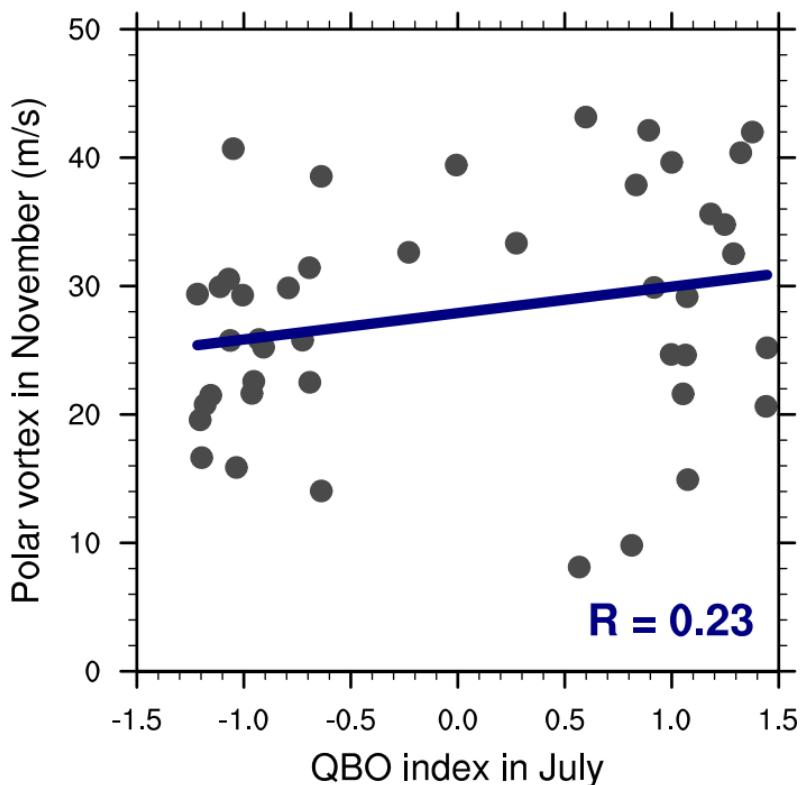


### (a) Correlations



### (b) QBO index & polar vortex



correlation between QBO index and polar vortex

$R = 0.23$