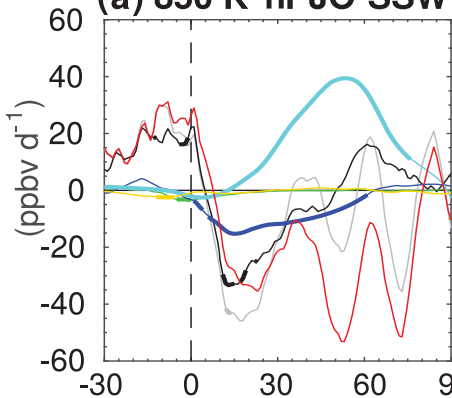
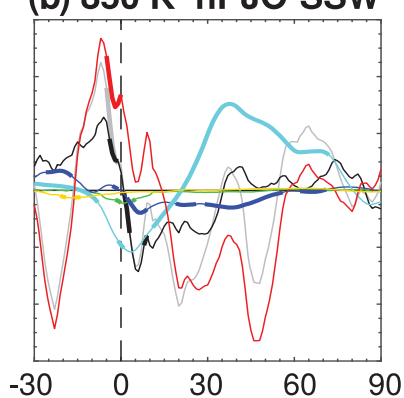
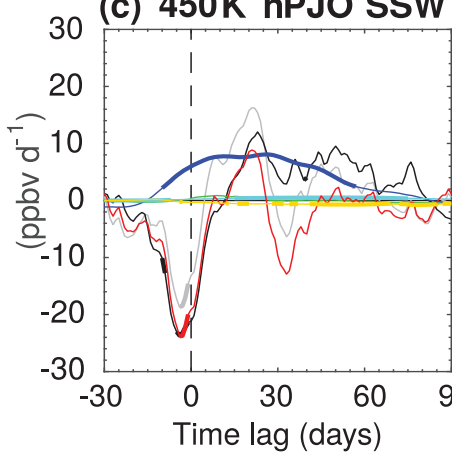
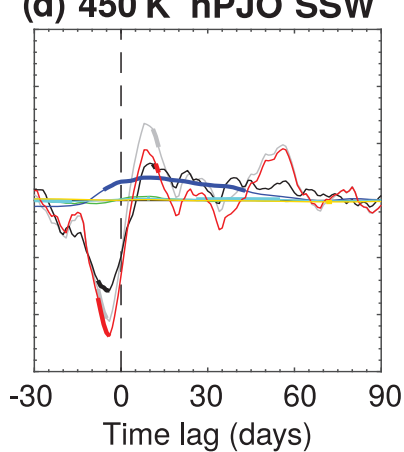


(a) 850 K nPJO SSW**(b) 850 K nPJO SSW****(c) 450K nPJO SSW****(d) 450 K nPJO SSW**

— $\partial_t O_3$: ozone tendency

— $-a^{-1}v^* \partial_\phi O_3$: isentropic mean advection

— $\partial_t O_3|_i$: indirect ozone tendency

— $-Q^* \partial_\theta O_3$: cross-isentropic mean advection

— $(a \cos \phi)^{-1} \partial_\phi (M_\phi \cos \phi)$: isentropic eddy transport

— $\partial_\theta M_\theta$: cross-isentropic eddy transport

— S^* : chemical tendency