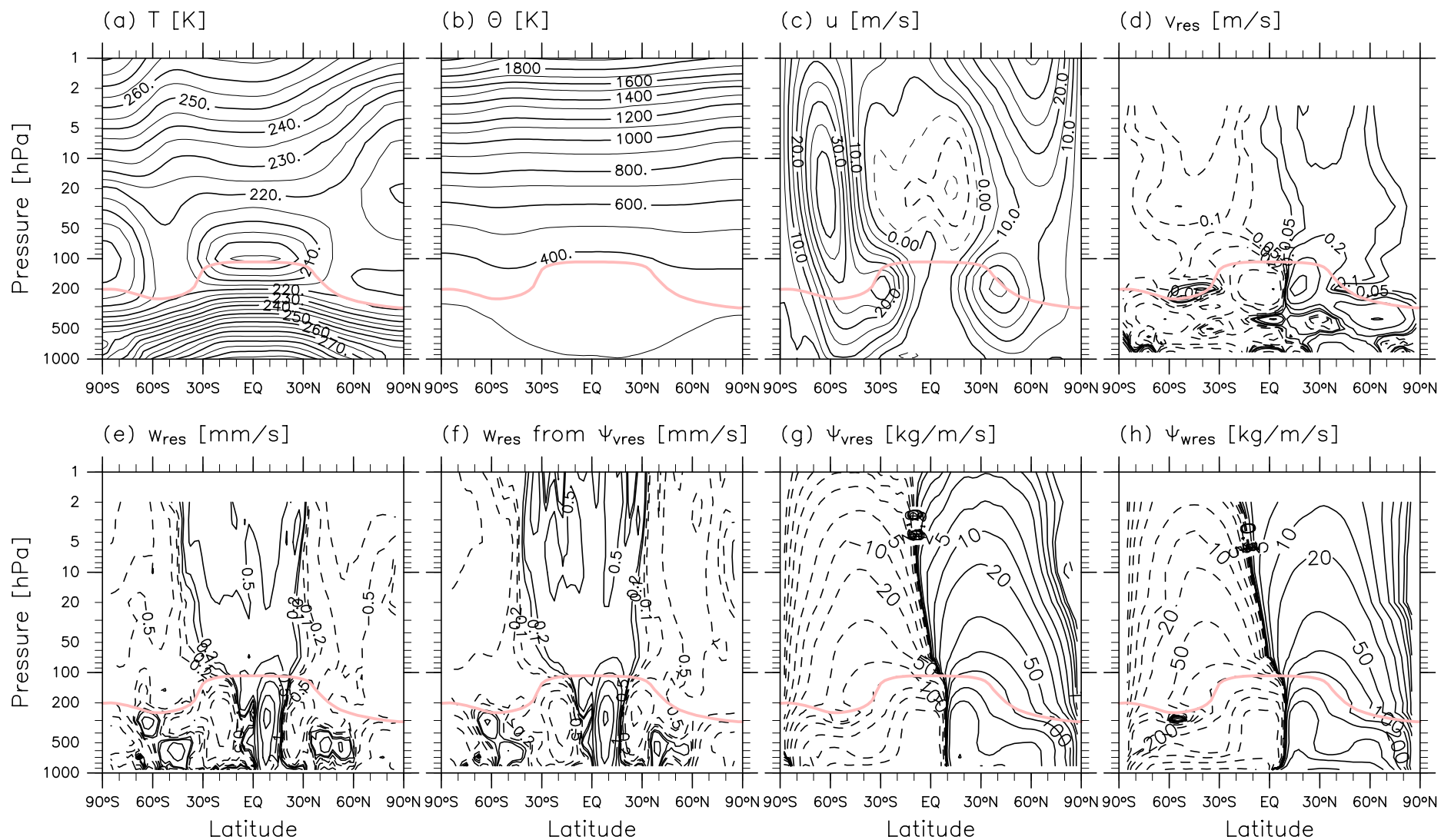


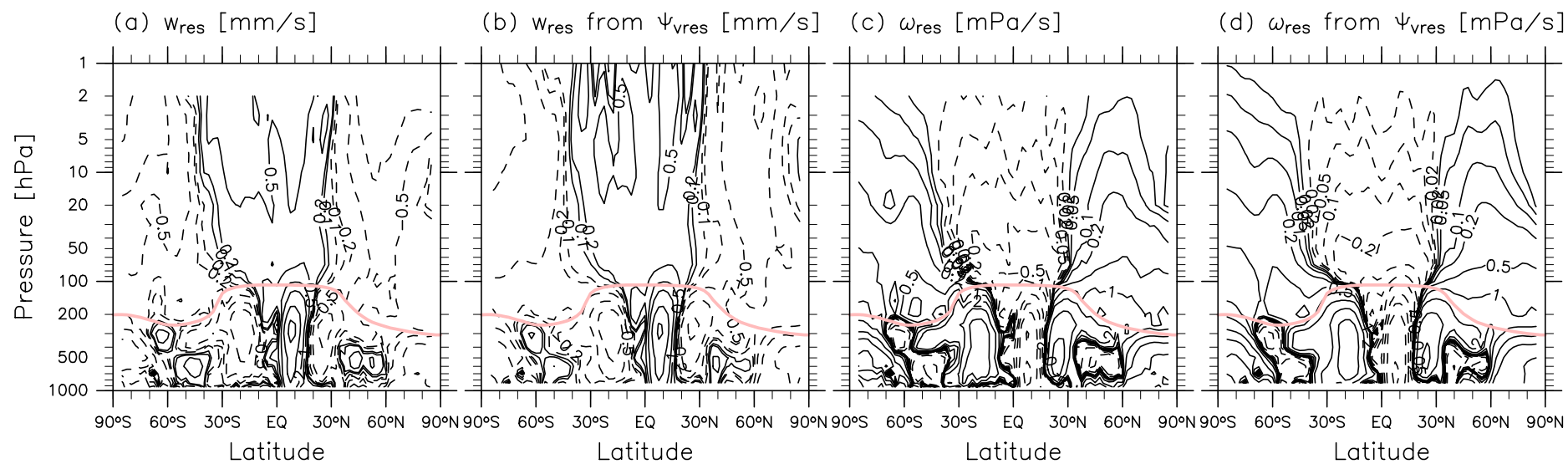
SON (81–10)

JRA-55



SON (81–10)

JRA-55



SON (81–10)

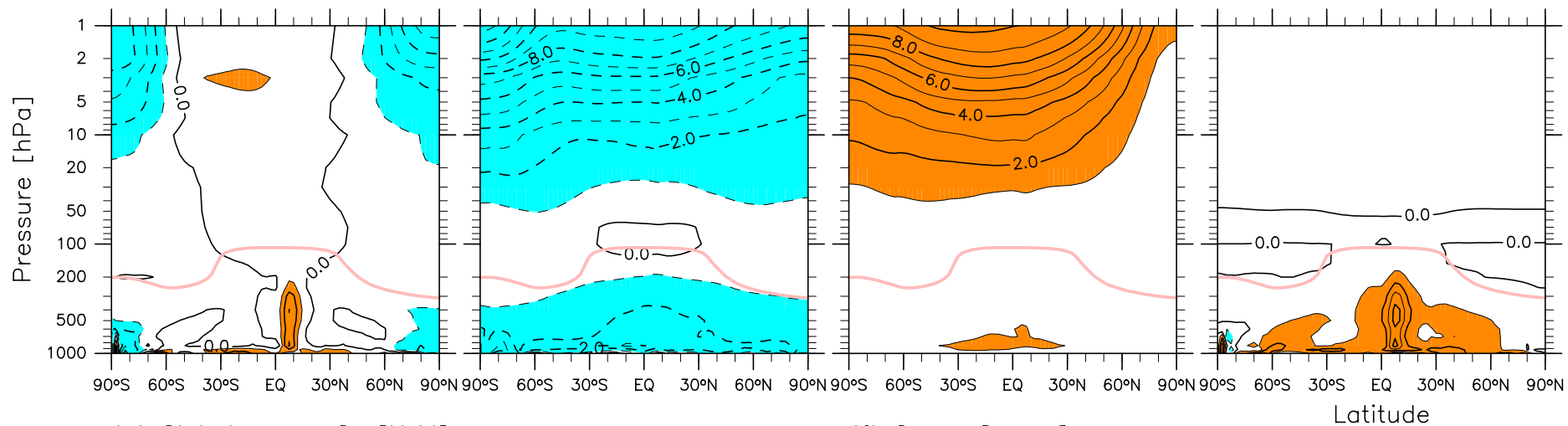
JRA-55

(a)  $Q_{\text{total}}$  [K/d]

(b)  $Q_{\text{longwave}}$  [K/d]

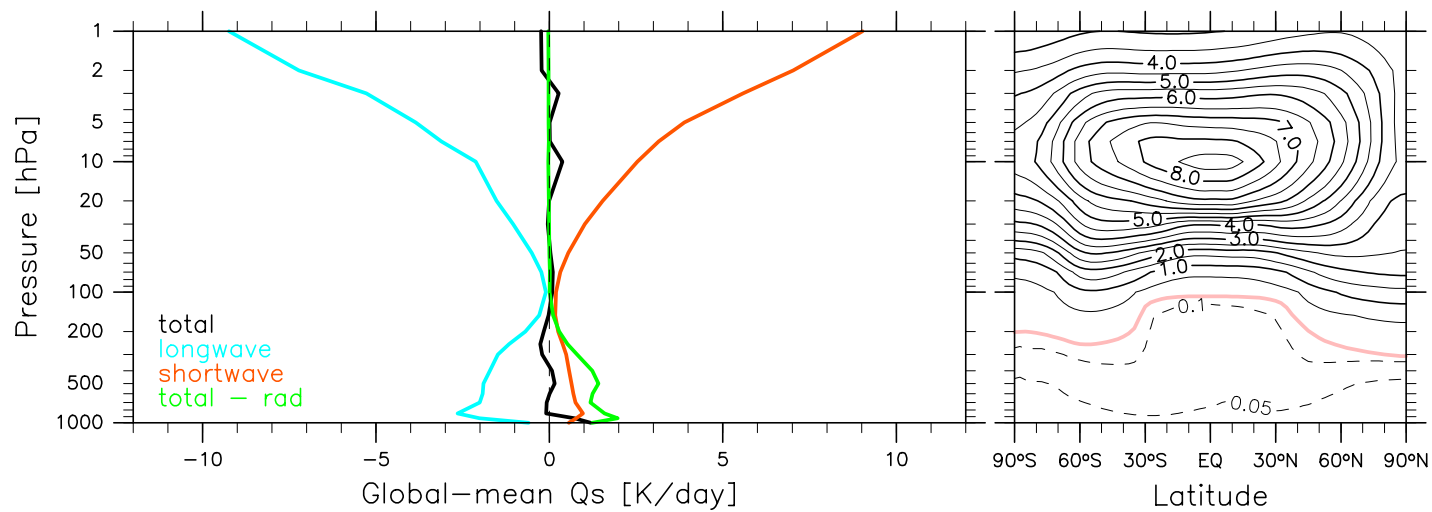
(c)  $Q_{\text{shortwave}}$  [K/d]

(d)  $Q_{\text{total}} - Q_{\text{rad}}$  [K/d]



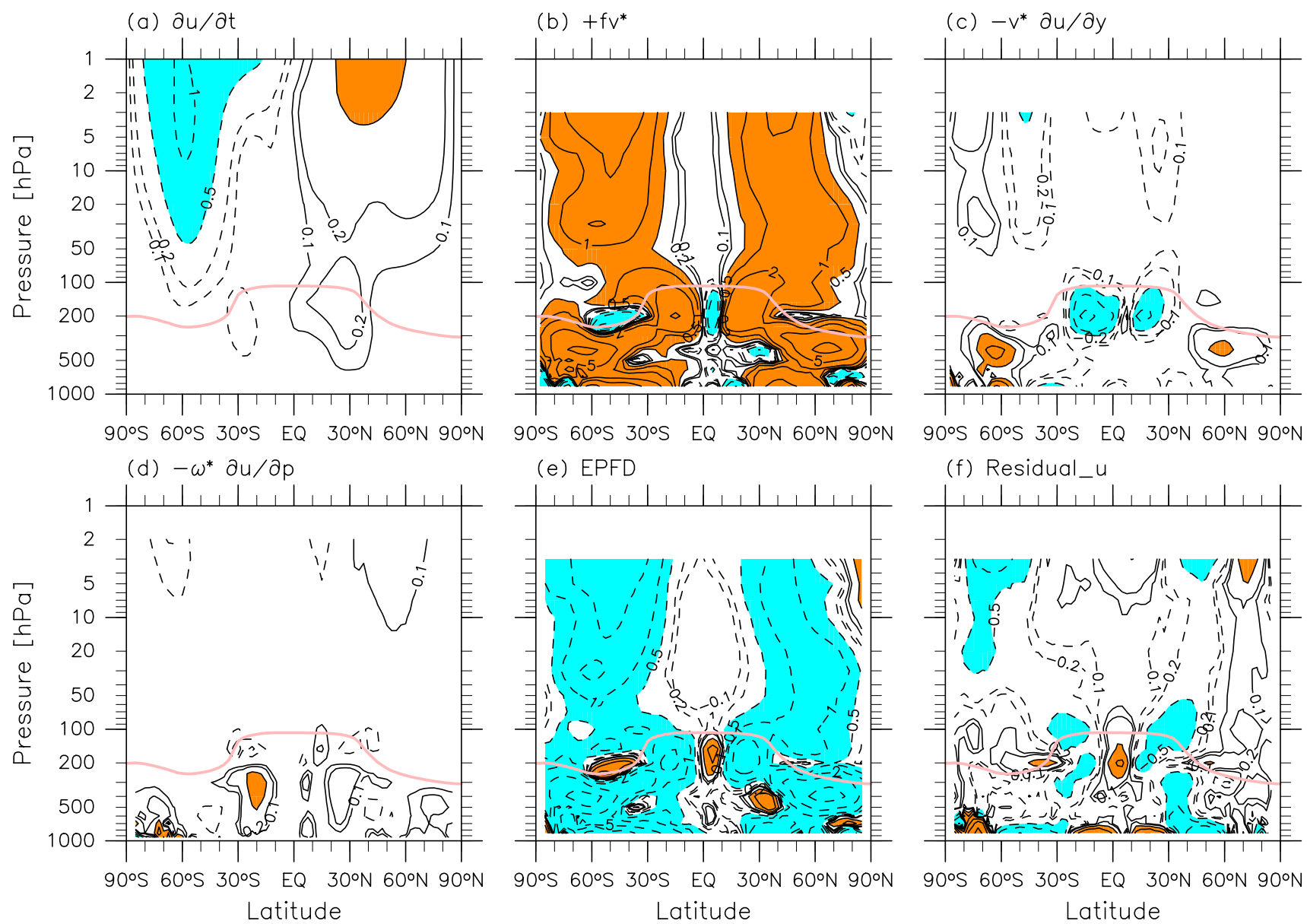
(e) Global-mean  $Q_s$  [K/d]

(f) Ozone [ppmv]



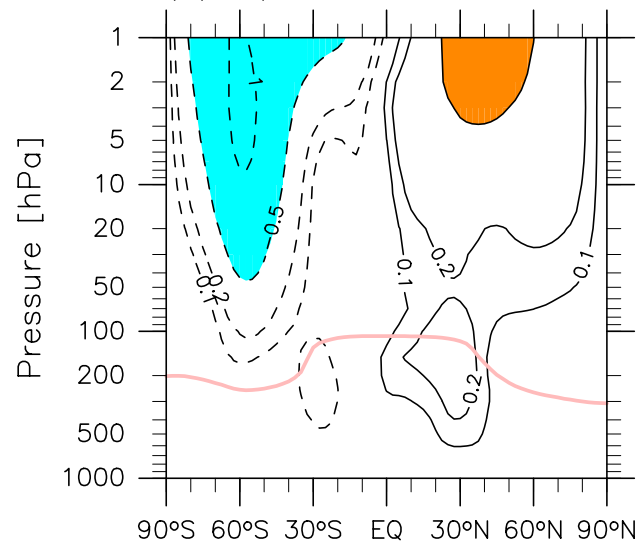
SON (81–10)

JRA-55



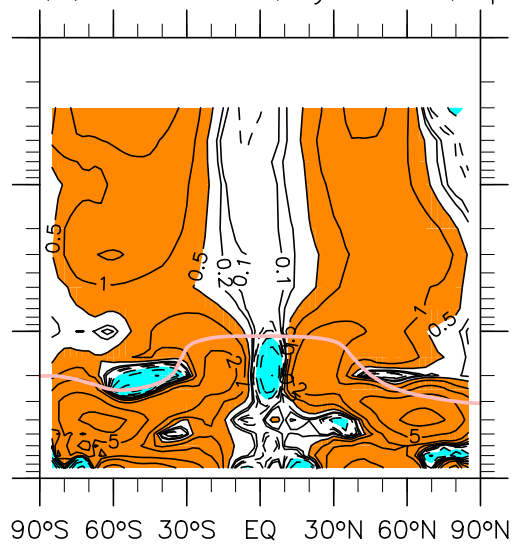
SON (81–10)

(a)  $\partial u / \partial t$

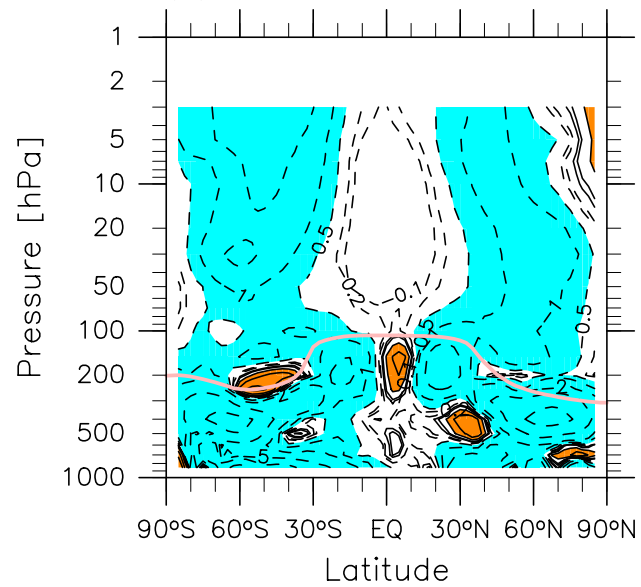


JRA-55

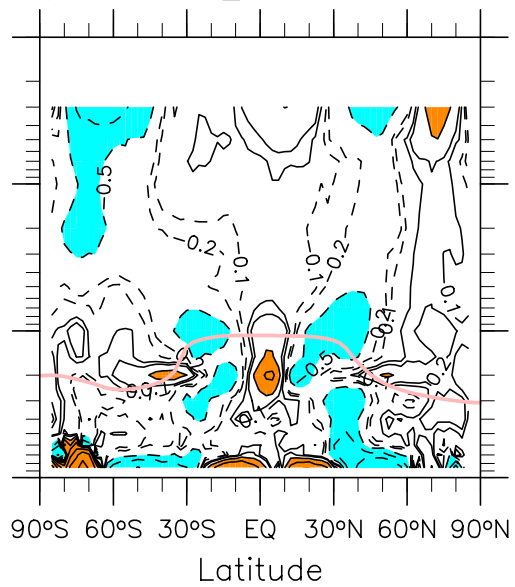
(b)  $+fv^* - v^* \partial u / \partial y - \omega^* \partial u / \partial p$



(c) EPFD

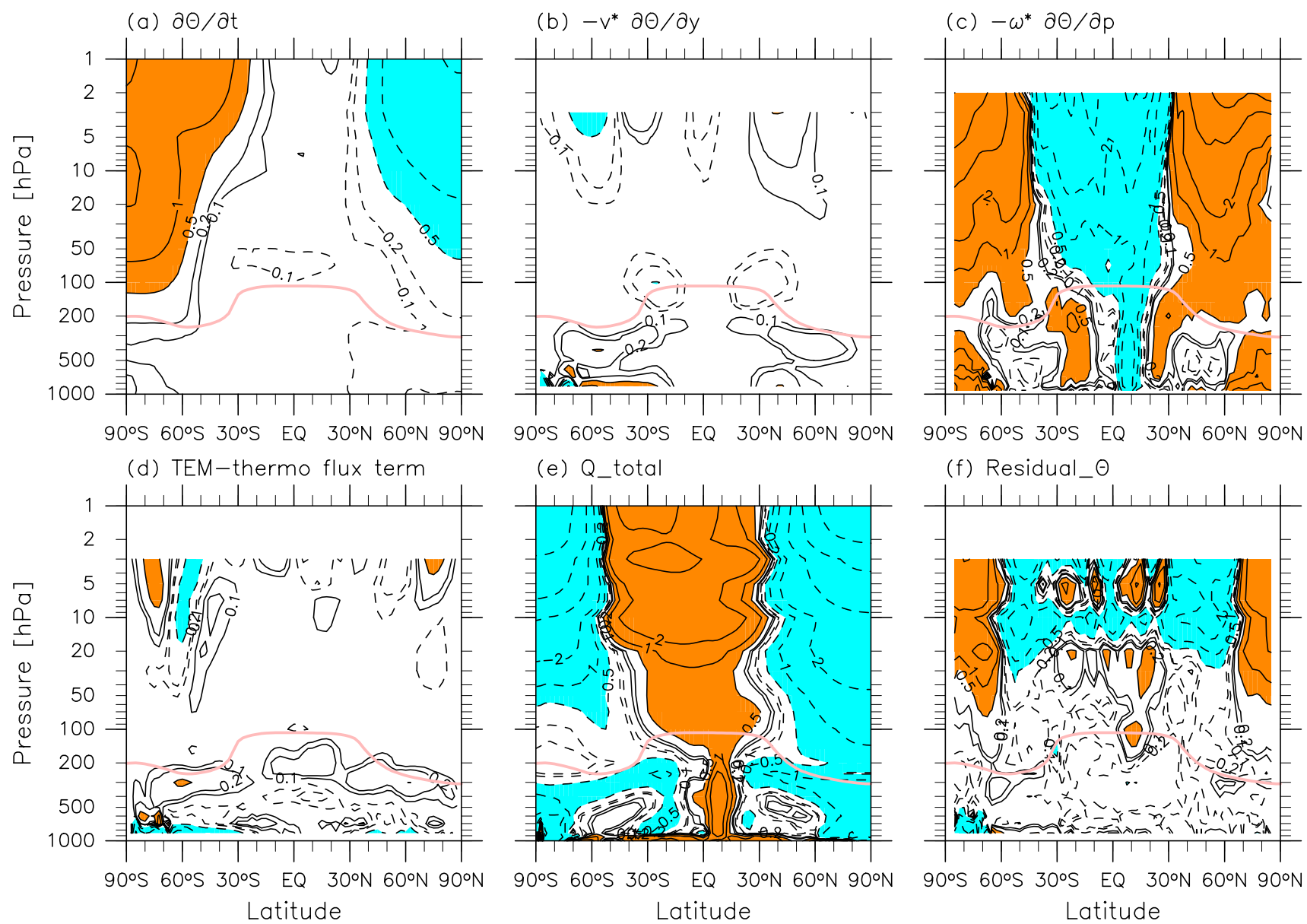


(d) Residual\_u



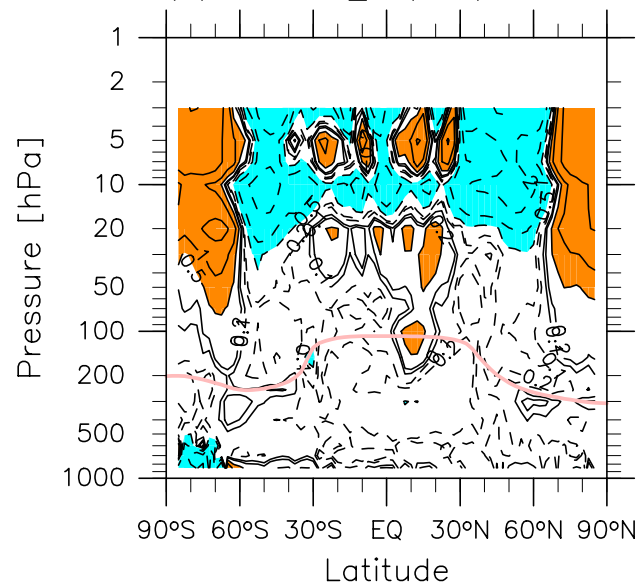
SON (81–10)

JRA-55

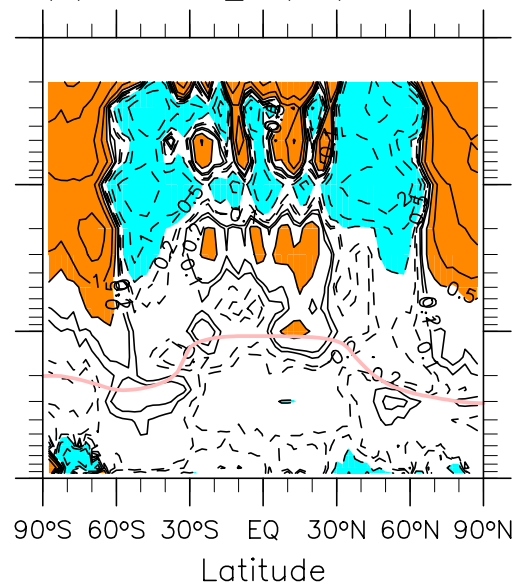


SON (81–10)

(a) Residual\_θ (TEM)



(b) Residual\_θ (EM)



JRA-55

(c) difference (TEM minus EM)

