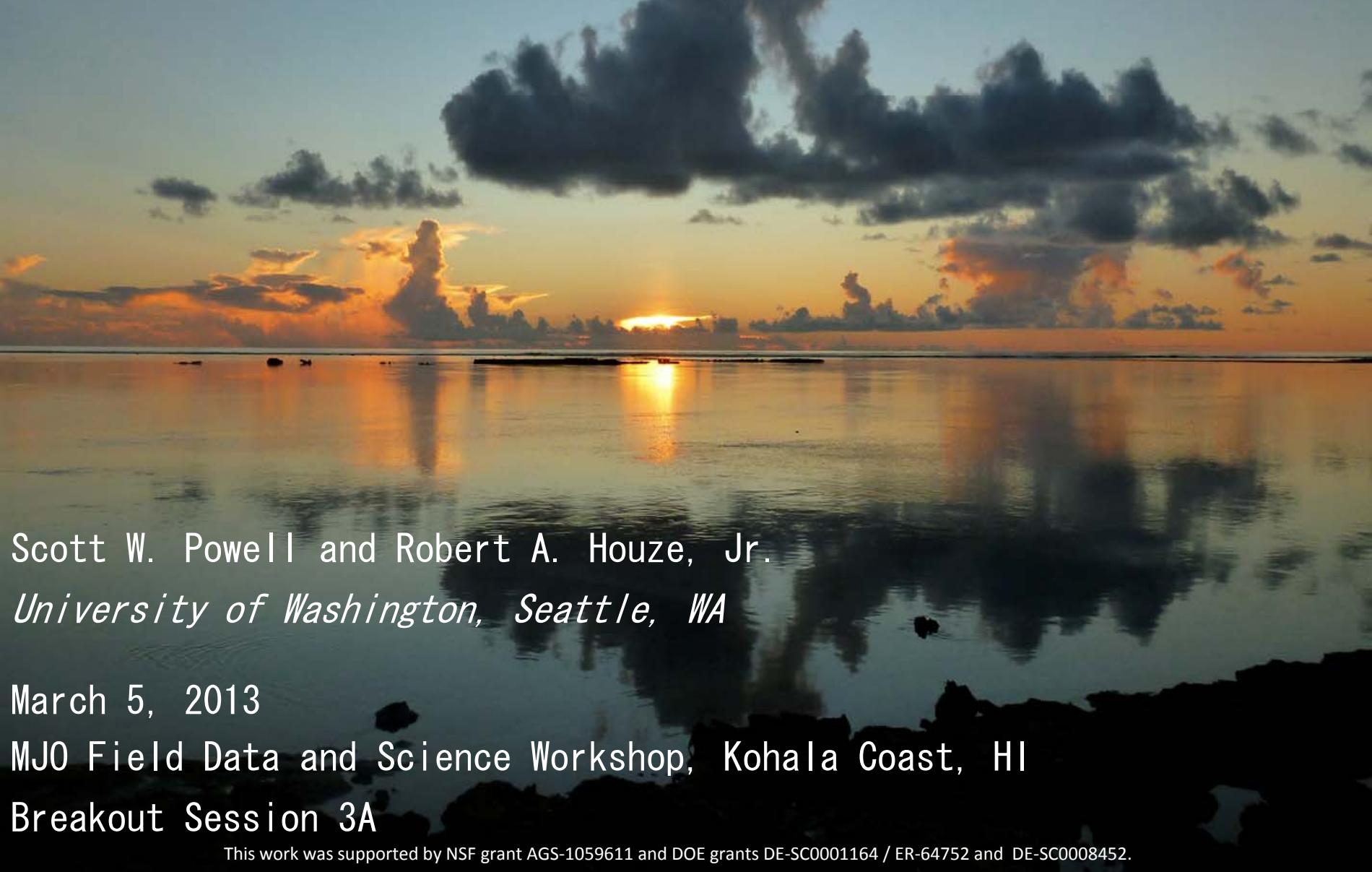


Evolution of Tropospheric Humidity and Convection Prior to MJO Onset



Scott W. Powell and Robert A. Houze, Jr.

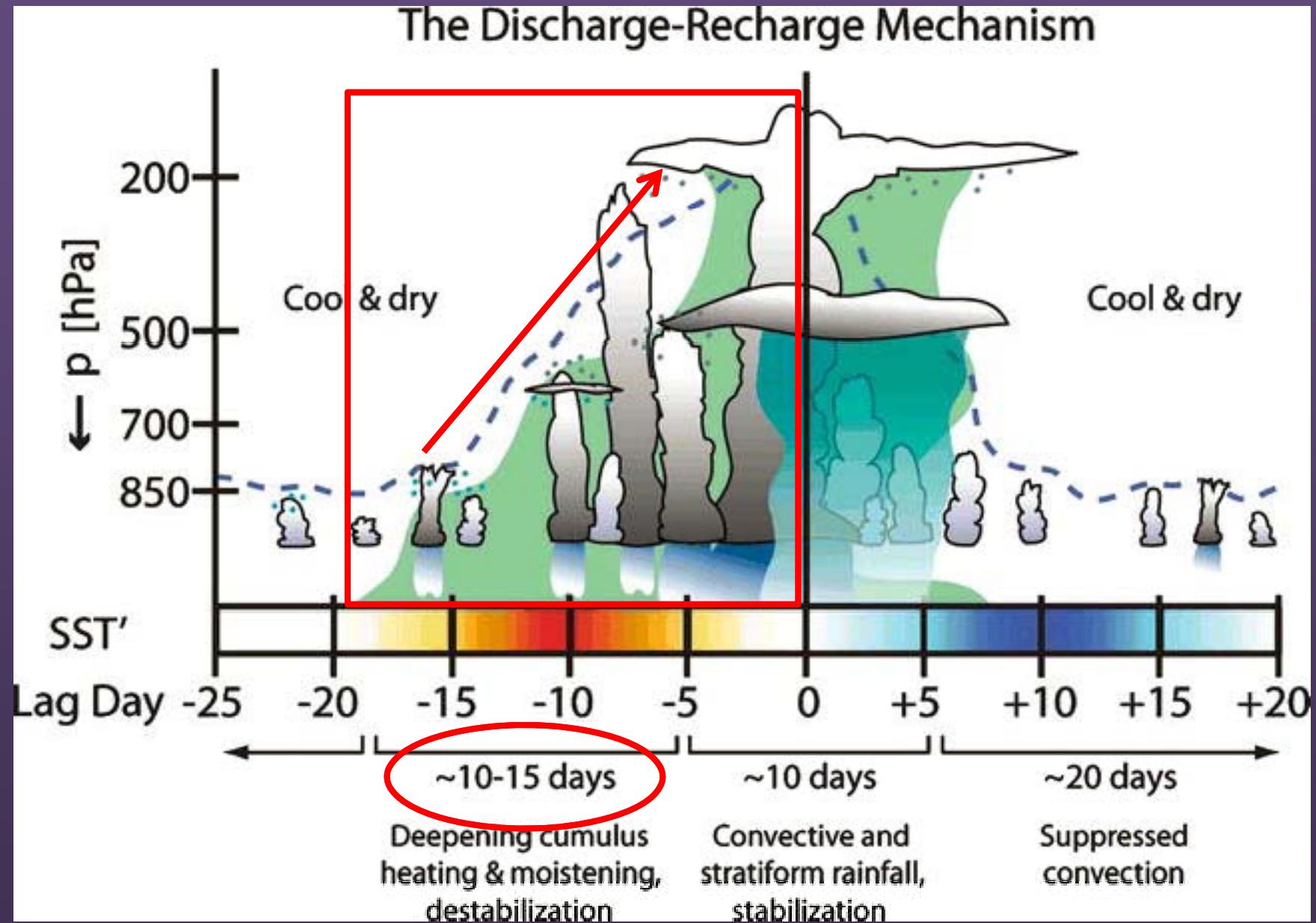
University of Washington, Seattle, WA

March 5, 2013

MJO Field Data and Science Workshop, Kohala Coast, HI

Breakout Session 3A

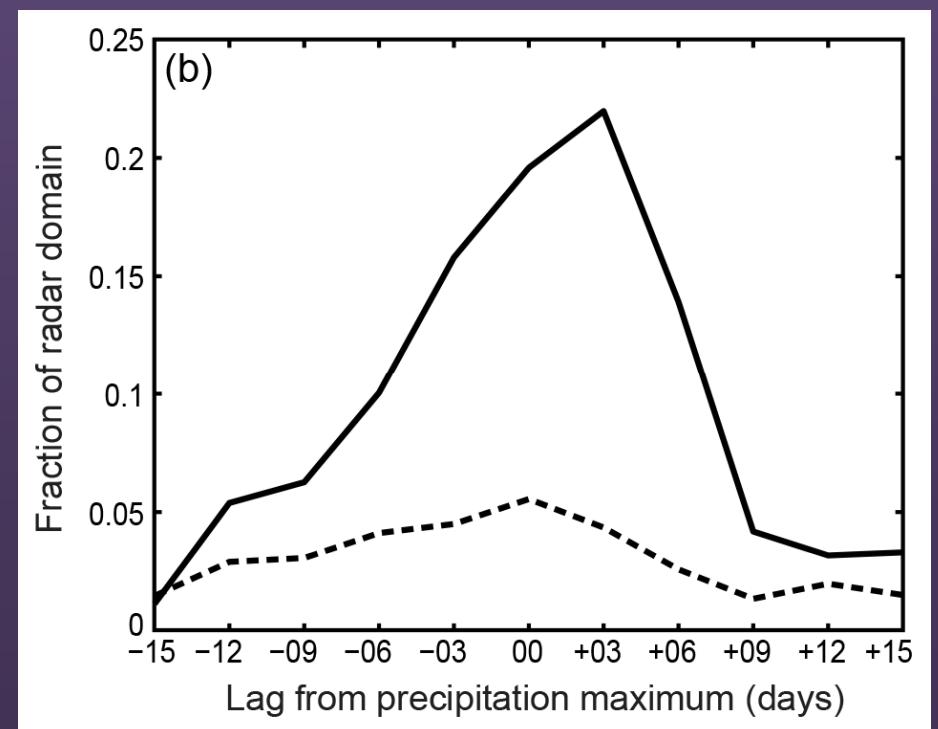
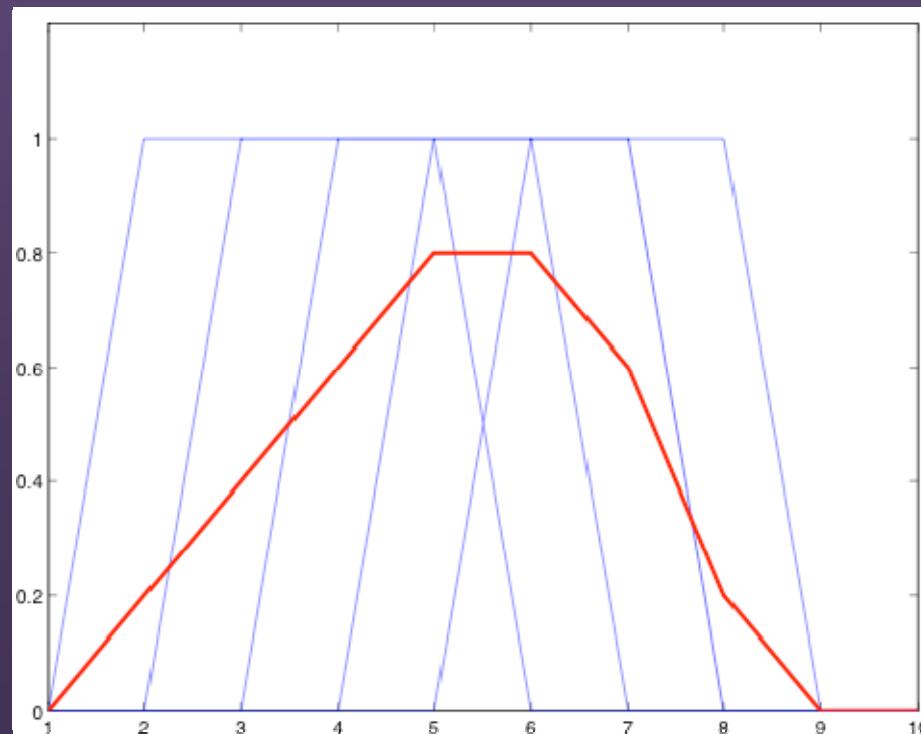
This work was supported by NSF grant AGS-1059611 and DOE grants DE-SC0001164 / ER-64752 and DE-SC0008452.

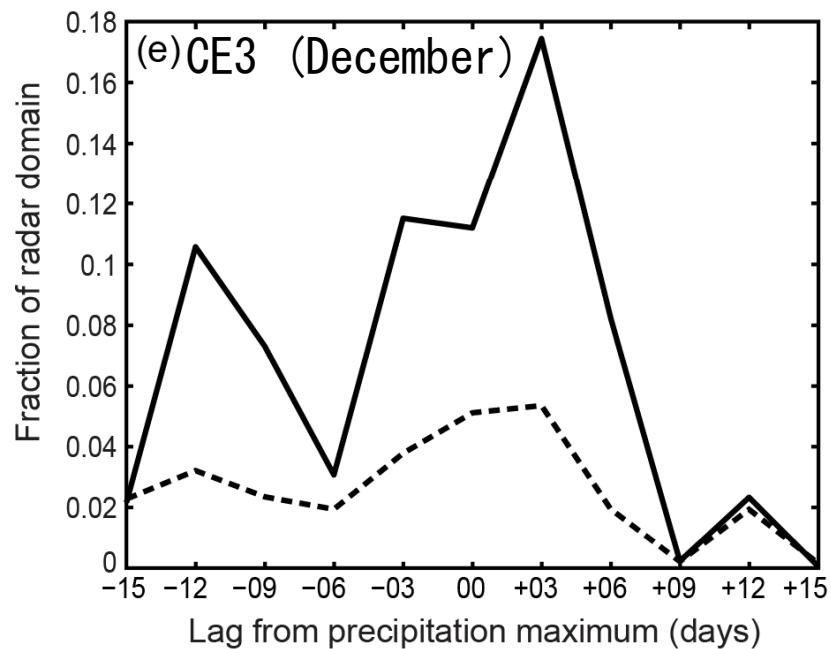
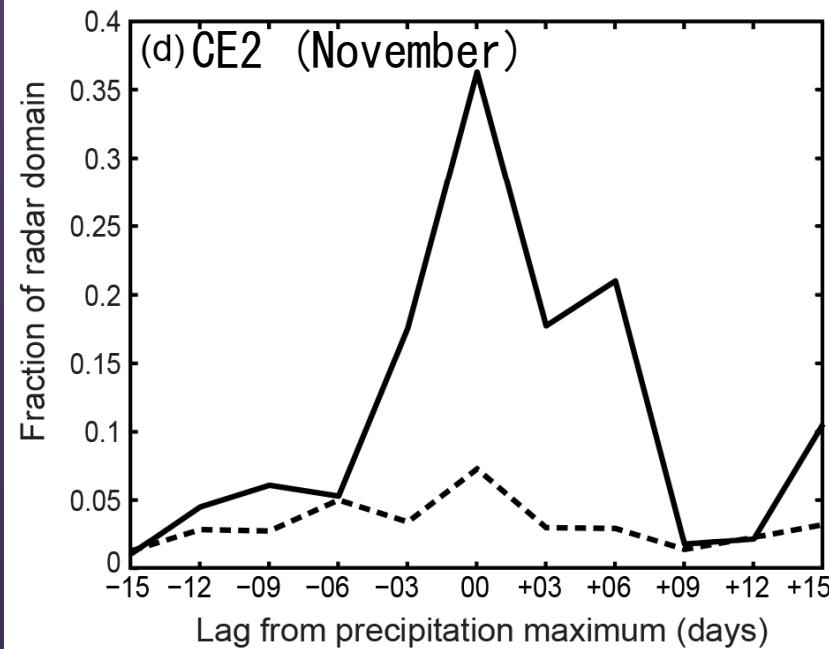
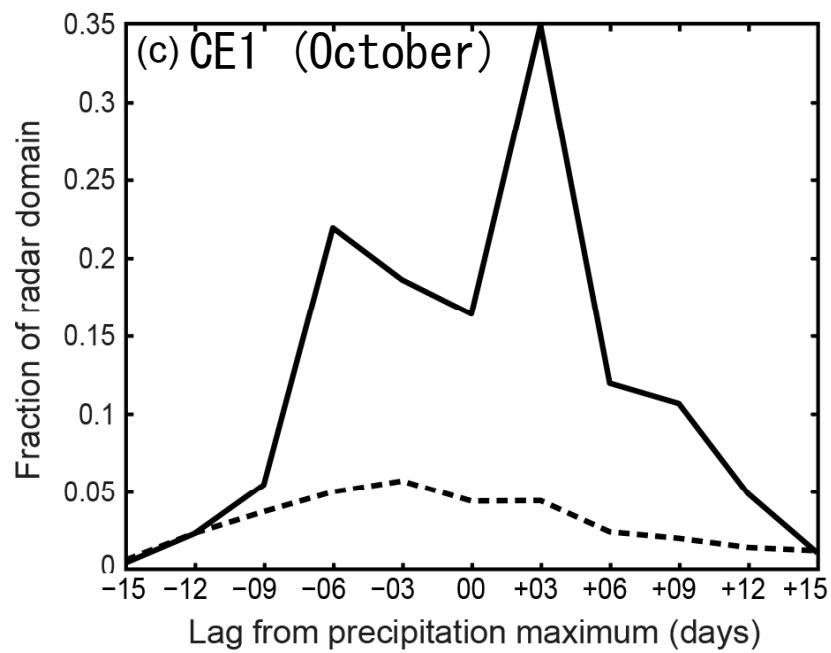
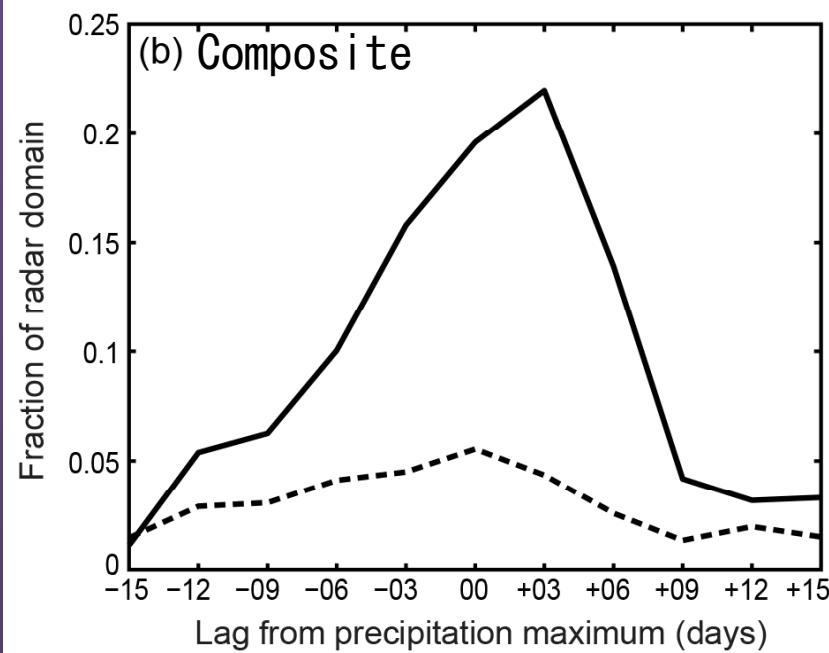


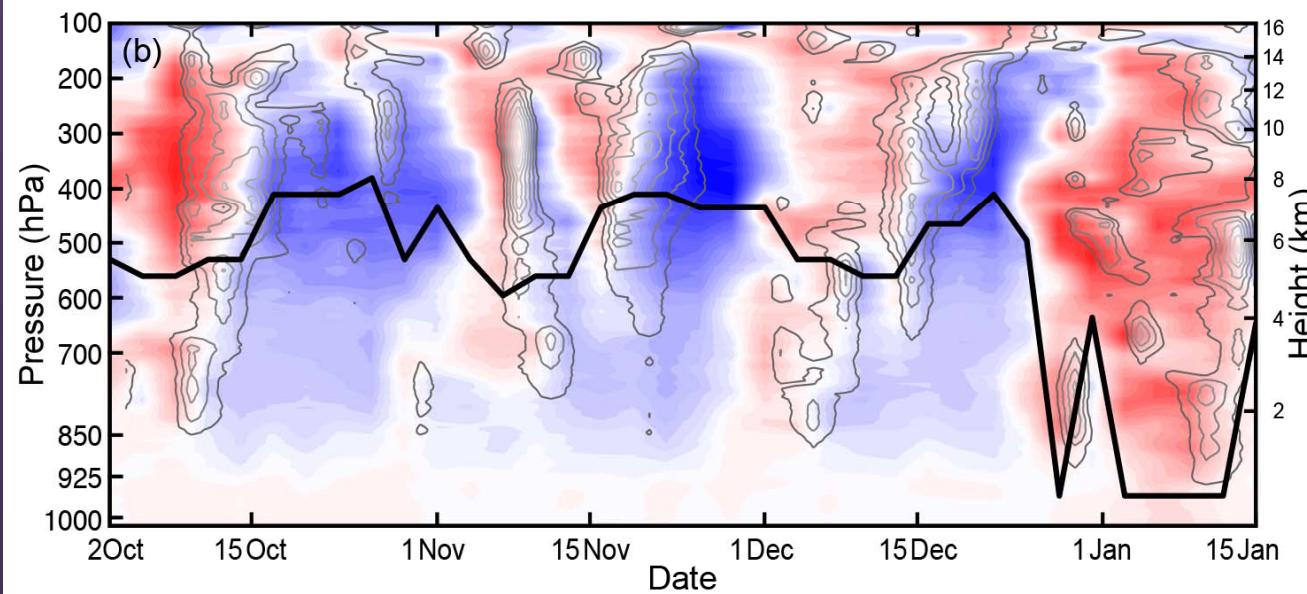
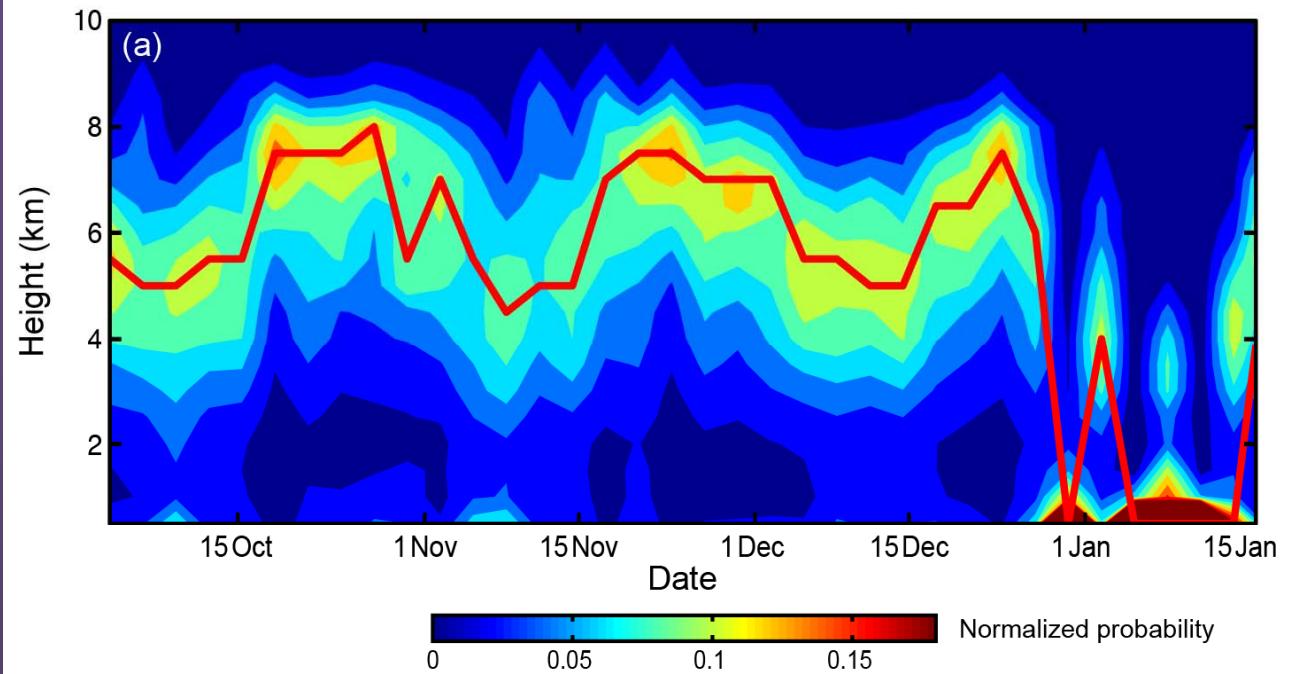
Bladé and Hartmann (1993); Kemball-Cook and Weare (2001); Benedict and Randall (2007)

Variability in precipitating clouds

- By MJO Phase (Wheeler & Hendon, 2004)
- Relative to filtered precipitation maximum







-1 -0.5 0 0.5 1
Smoothed q^*

0 0.2 0.4 0.6 0.8 1
 $\frac{\partial}{\partial t}$ (Smoothed q^*)