

HHH 20th June 2015 : Brian Hoskins

Tropospheric Equatorial Waves

WMRG & cross equatorial flow R_0 .

Rossby mode \rightarrow rotational symmetry R_1
about equator

\hookrightarrow from obs present clearly in
Eastern Hemisphere @ 850 hPa
critical time 2 weeks
Low level Rossby wave
 \hookrightarrow with strong MRG at upper levels

Easterly Kelvin waves propagate into strat.
MRG & R_1 westerlies propa. . . .

Have action density (Bretherton & Garrett 78?)

Yang & T, Hoskins, B. Slingo 2003 - start!

Then 2007 a, b, c

2009 - models

2011 - Q130

May 20?

2013 - ENSO