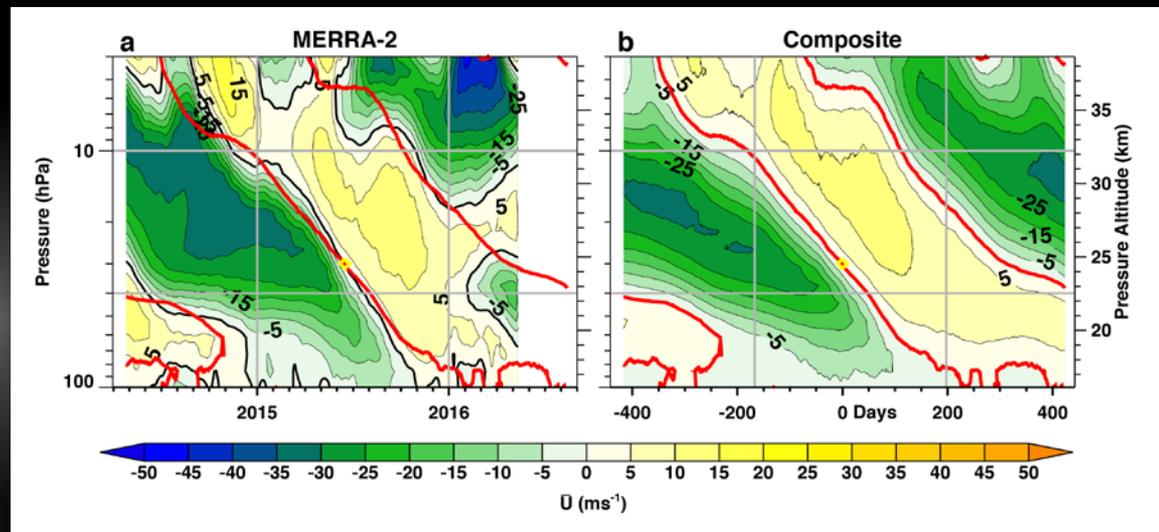
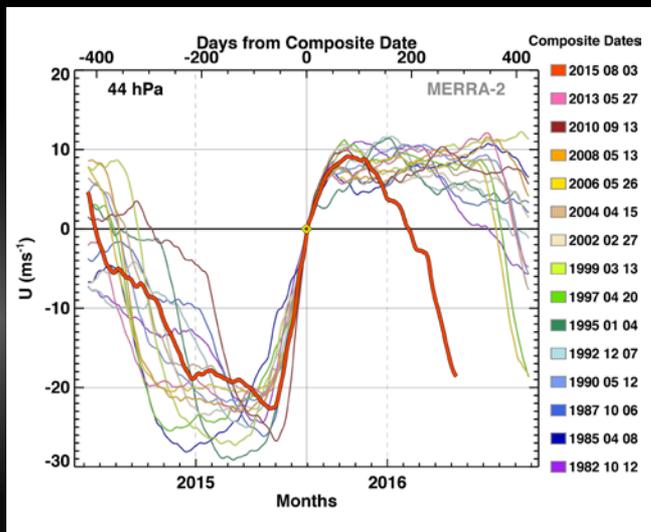


Rebooting the Quasi-Biennial Oscillation (QBO)

The unusual tropical stratospheric winds of 2016



LEFT: Tropical winds in the lower stratosphere (~17 to 37 km and 10° S to 10° N) change direction from easterly to westerly with a period of ~28 months. The westerly cycle typically lasts about a year, but the latest westerly cycle only lasted about six months. **RIGHT:** 2016 pattern shows that the actual QBO deviated from its typical behavior, based on an average of the 14 previous QBO cycles, throughout the lower stratosphere altitudes.