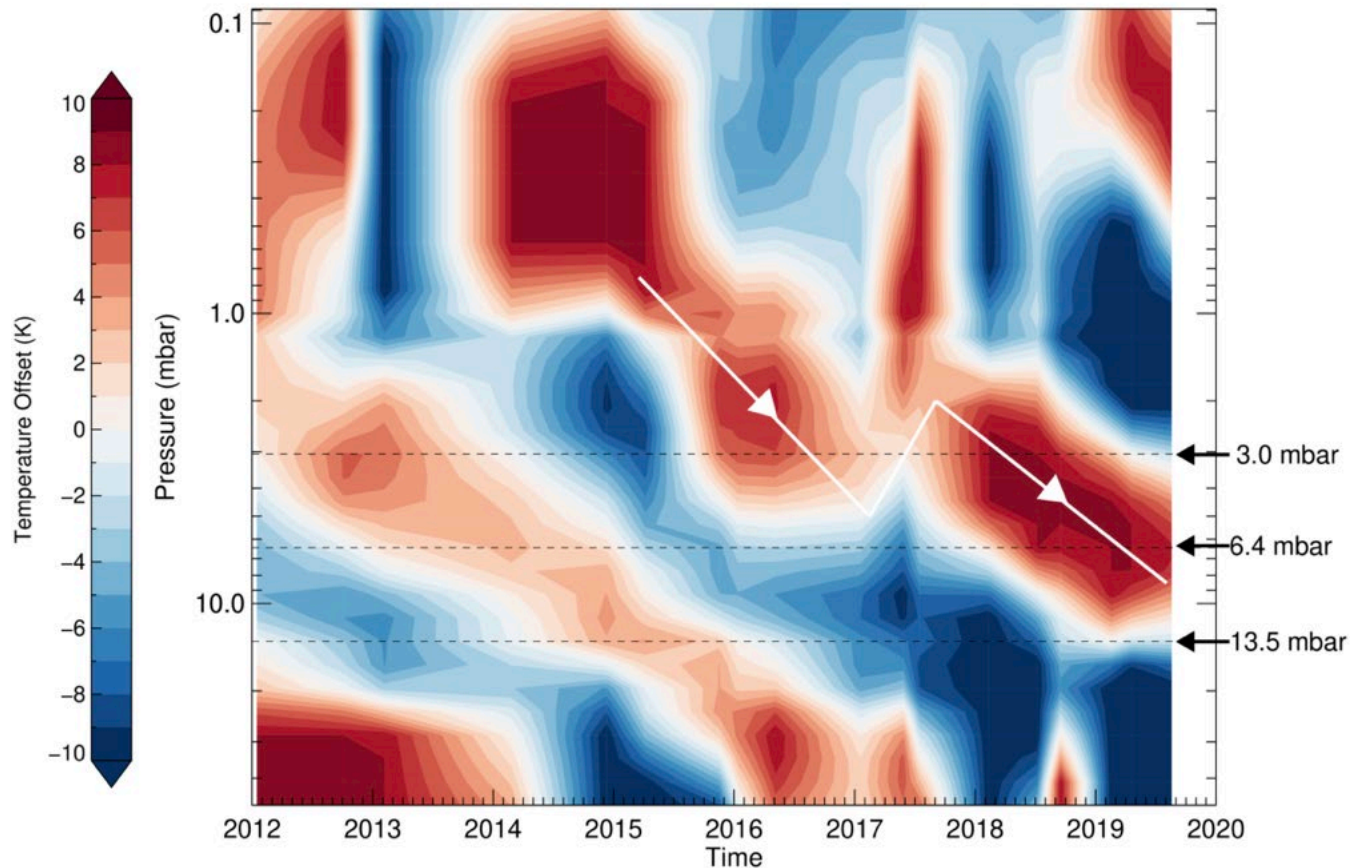


Vertically-resolved observations of Jupiter's quasi-quadrennial oscillation from 2012-2019

R. S. Giles*¹, T. K. Greathouse¹, R. G. Cosentino²

¹Southwest Research Institute, San Antonio, Texas ²NASA Goddard Space Flight Center, Greenbelt, Maryland



- Jupiter's quasi-quadrennial oscillation (QQO) is a temperature/wind oscillation in the planet's equatorial stratosphere with a period of ~4 years
- Comparable to Earth's quasi-biennial oscillation (QBO) and Saturn's semi-periodic oscillation (SPO)
- Observed using imaging data since 1980
- Since 2012, we've been observing with TEXES spectrometer, which allows us to vertically-resolve the stratospheric temperatures
- Now have observations of ~2 cycles. We observed a disruption in the pattern in 2017