Overlying a satellite image of Hurricane Jeanne, are plots of the time evolution of minimum sea level pressure (SLP; top panel) and TRMM Microwave Imager rain rate (bottom panel), the latter averaged over a 1° radius around the center, during September 13-17, 2004. The average rain rate within the hurricane core oscillates with a period of approximately 12 hours. This oscillation agrees well with the evolution of infrared cloud-top temperature, as well as our simulation using a high-resolution, regional atmospheric model.

Tim Li et al., J. Atmos. Sci., 2006