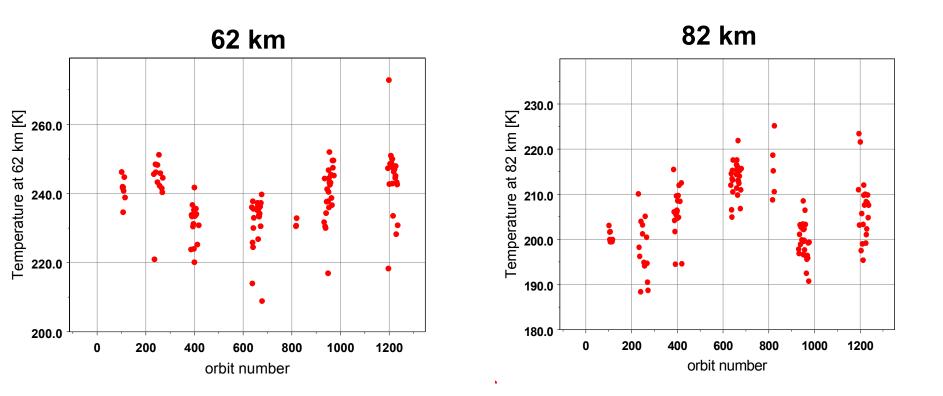
## Oscillations in Venus neutral atmosphere

**Paul Withers** 

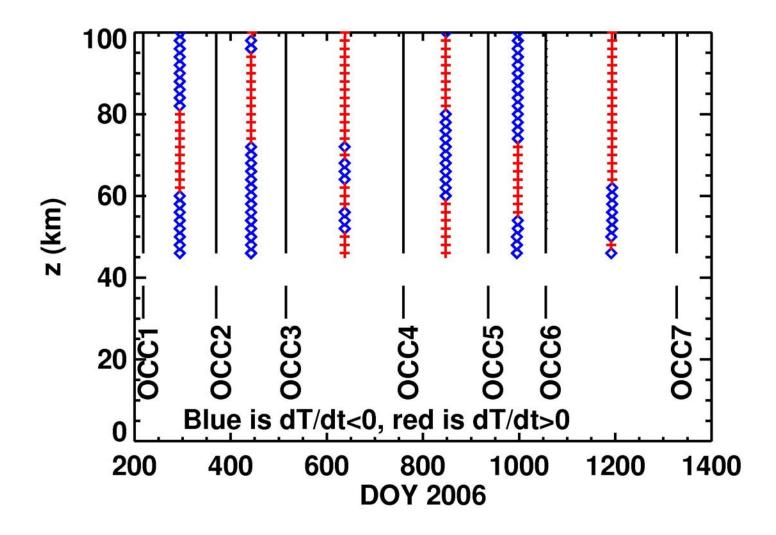
Center for Space Physics, Boston University (withers@bu.edu)

MEX/VEX Radio Science Meeting 2010.08.03-04 Sugarbowl, Nevada

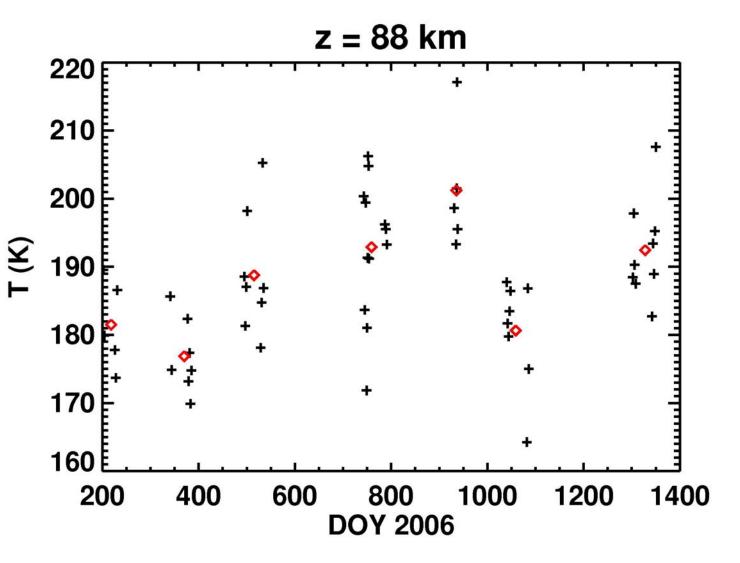
## Orbit Dependency at the Poles (From Silvia's presentation in Bonn)

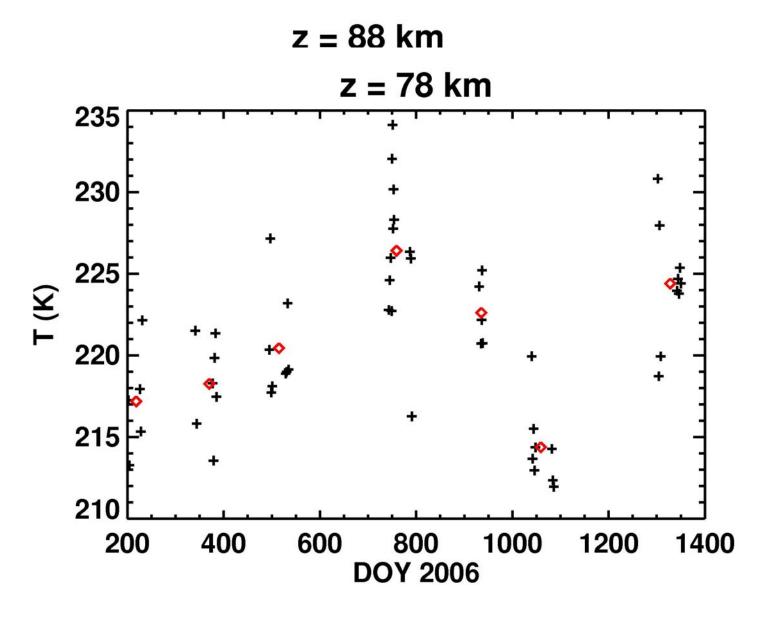


Are these some kind of long-period oscillation in the atmosphere?

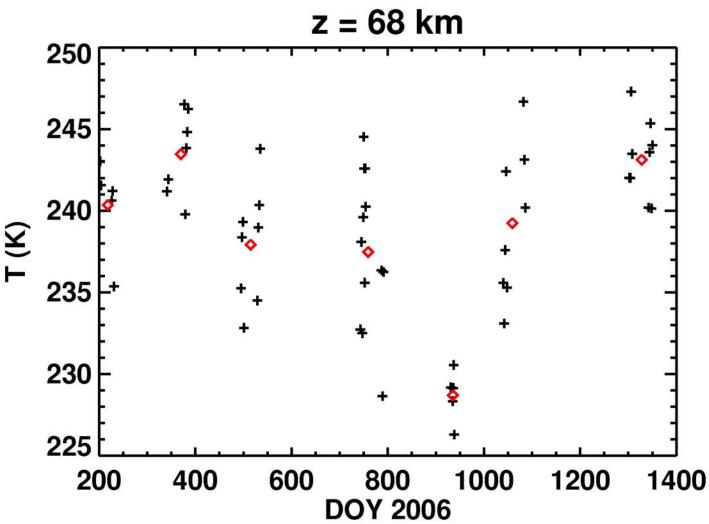


Coherent structures seem to be present





z = 88 km z = 78 km



$$z = 88 \text{ km}$$

$$z = 68 \text{ km}$$

$$z = 58 \text{ km}$$

$$270$$

$$265$$

$$260$$

$$255$$

$$250$$

$$245$$

$$245$$

$$245$$

$$245$$

$$240$$

$$235$$

$$200$$

$$400$$

$$600$$

$$800$$

$$1000$$

$$1200$$

$$1400$$

$$1400$$

z = 88 kmz = 78 km

Period is ~700-1000 days **z = 68 km**Anyone know an atmospheric **z = 58 km**dynamicist who could interpret **z = 48 km** 

