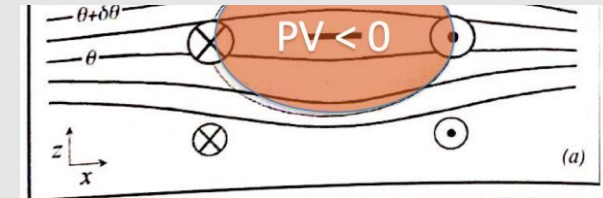
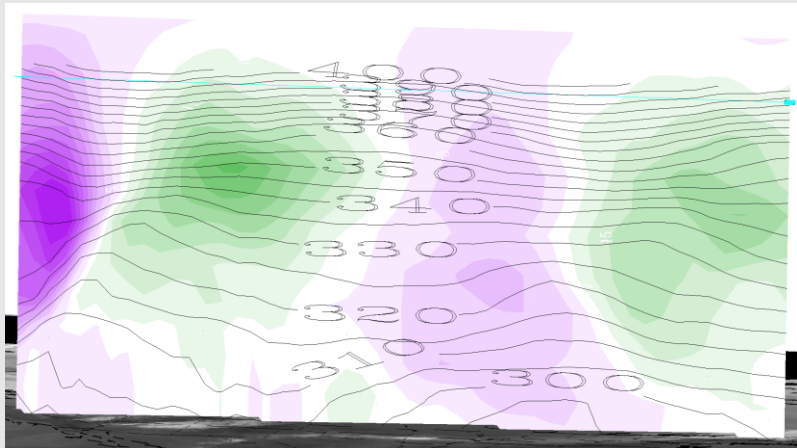
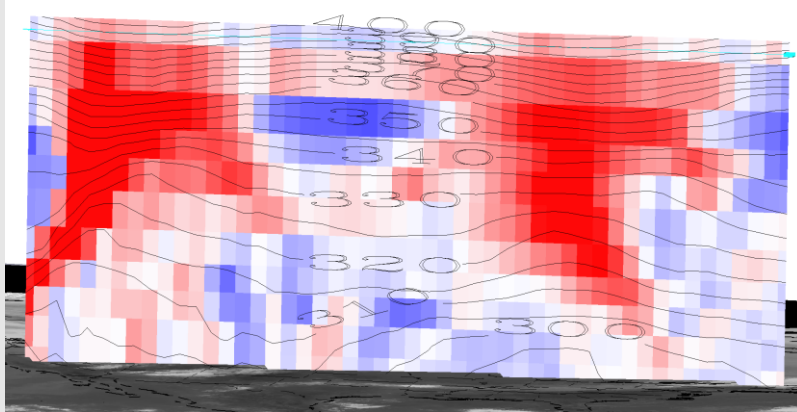




Warm-core vs. Cool-Core Vortices

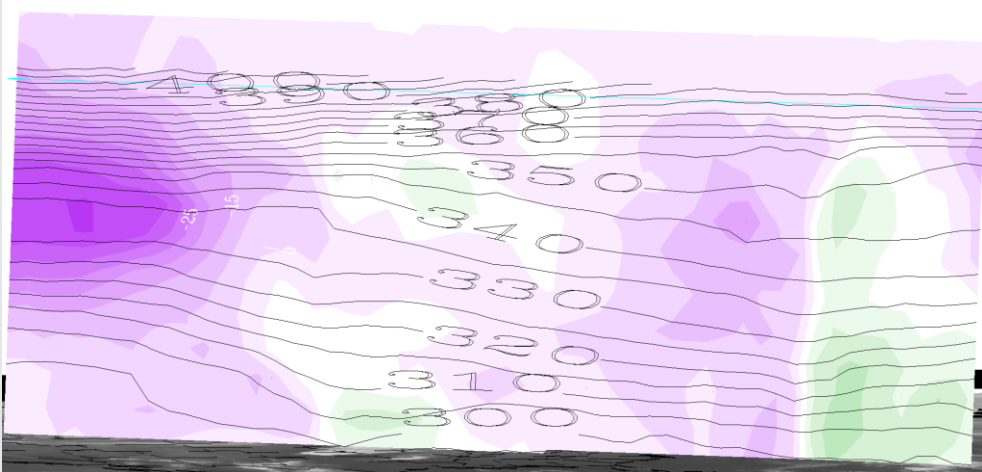
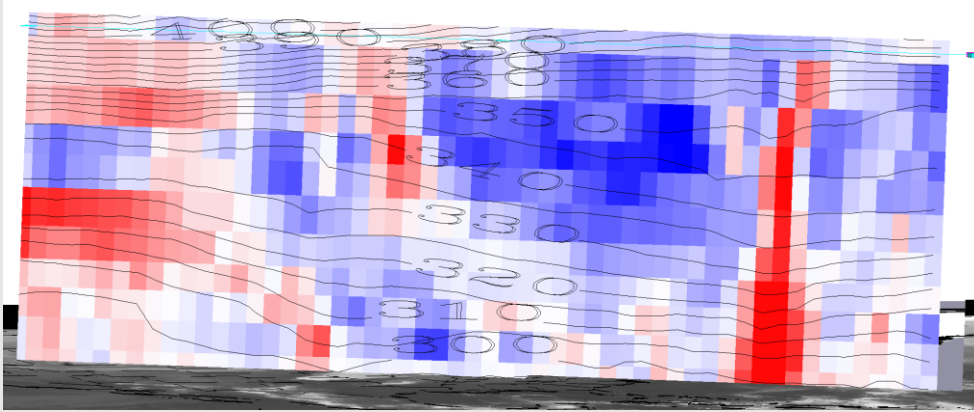
Cristina Fayad Martínez

A warm core anticyclone

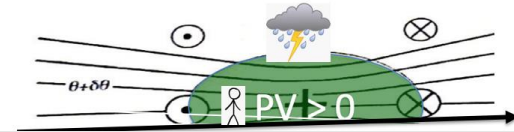


- Location: Between Colorado and Kansas
- Between the 300K – 340K theta countour lines
- Clockwise motion
- Area of high pressure

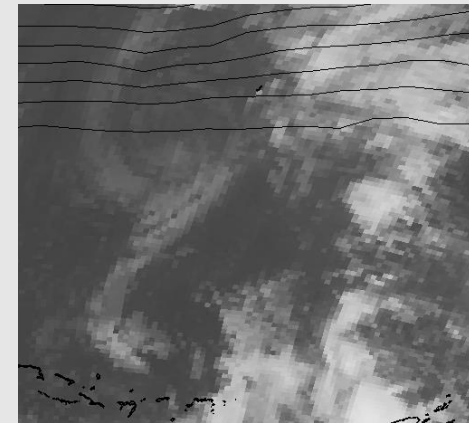
A warm core cyclone



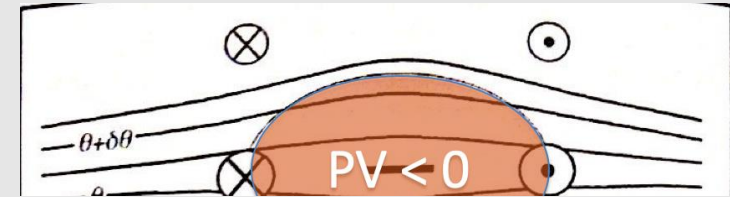
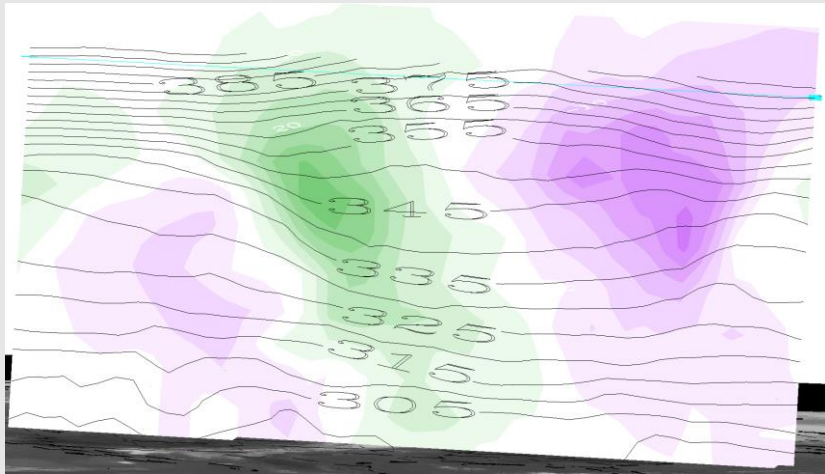
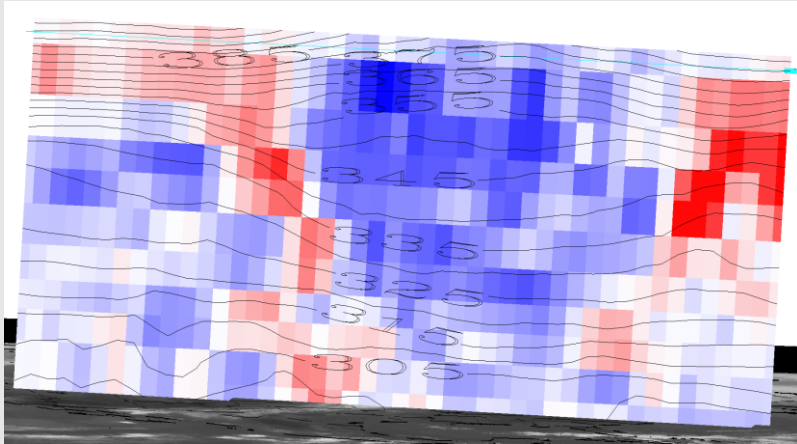
This is called a *warm core* cyclone:



- Location: Atlantic ocean
- Can be found between the 300K – 330K theta contour lines
- Counterclockwise motion
- It is an area of low pressure

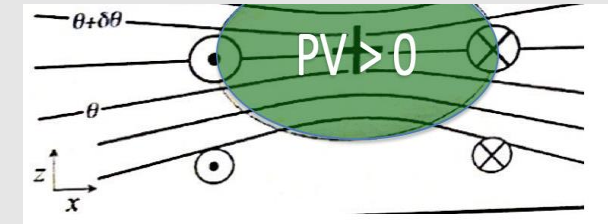
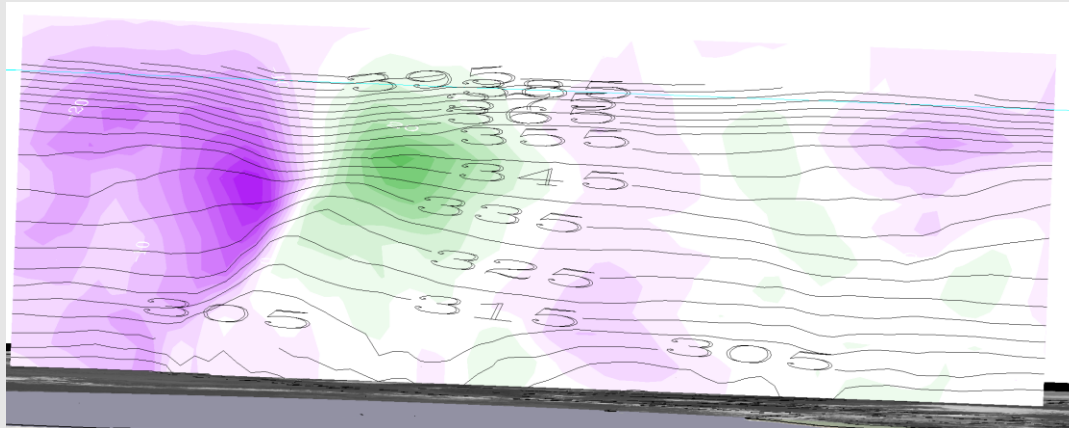
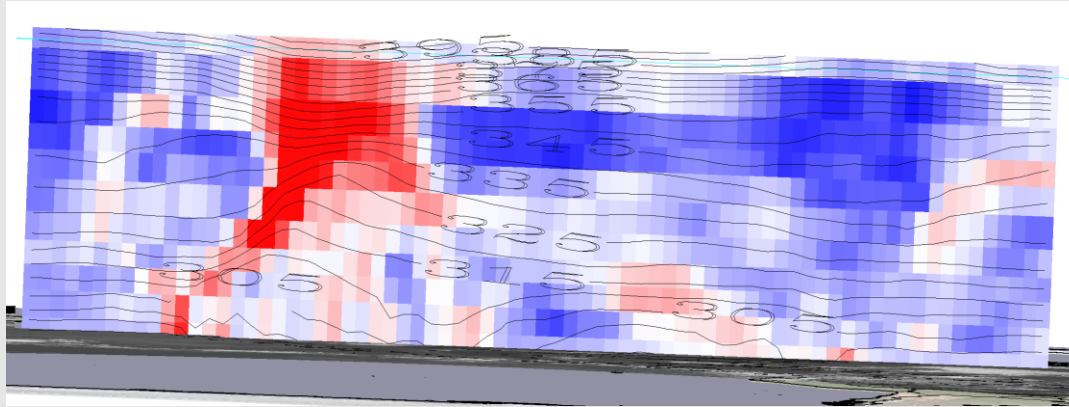


A cool core anticyclone



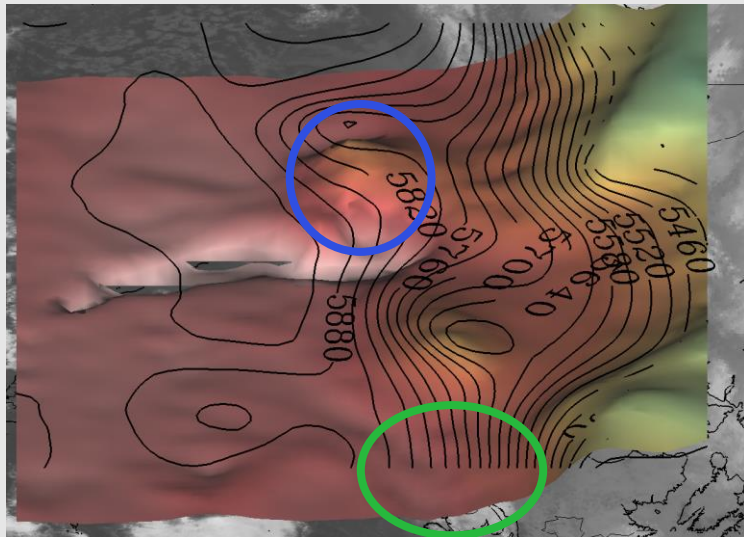
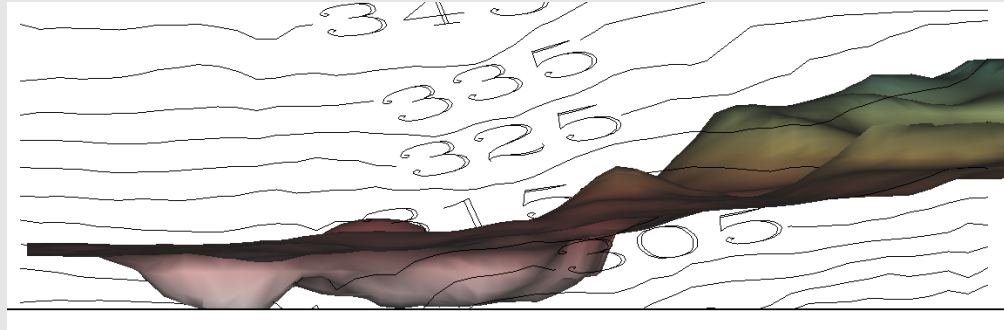
- Location: between Missouri and Arkansas
- Can be found between the 335K – 385K theta contour lines
- There is a clockwise motion
- It is an area of high pressure

A cool core cyclone (?)



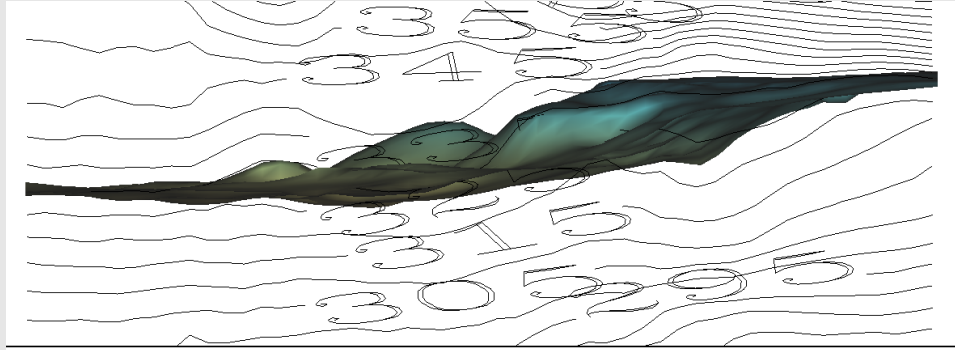
- West side of US
- Between Utah and Colorado
- It is between the 325K – 395K theta contours
- There is a counterclockwise movement of air.
- It is an area of low pressure.

310K Isosurface

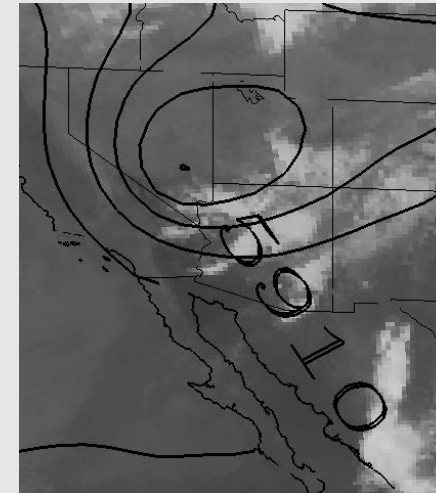
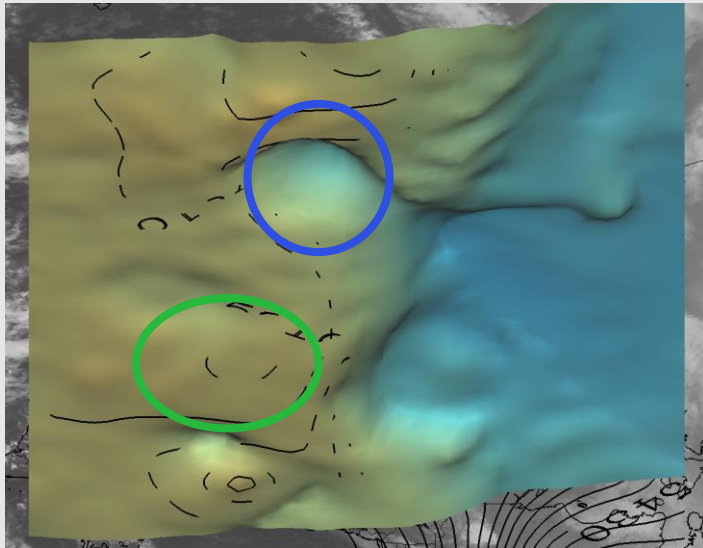


- There is a positive slope
- Peak represented by the blue circle: northwest of the map. It is a high-pressure system.
- Depression represented by green circle: northeast of the map. There is a low-pressure system

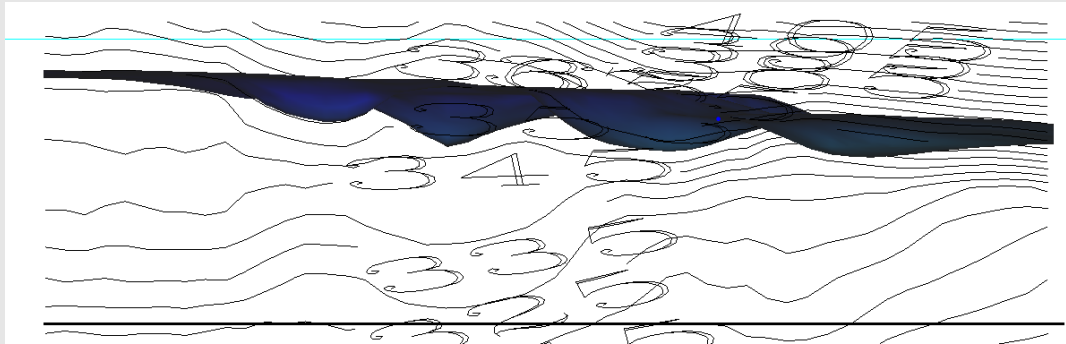
330k Isosurface



- Once again, there is a positive slope, but smaller in comparison to the 310K
- Peak (blue): Southwest of the US. High pressure system
- Depression (Green): no geopotential height showed, located from Kansas to Florida. Low Pressure system



360k Isosurface



- Neutral slope, could actually be considered negative
- Peak (red): can barely see them, but exist (just had to turn the projection for a little while)
- Depression (green): around six → lots of low-pressure areas.

