

700 hPa front

Rearward tilt of cold  
fronts with height

Surface front

### Post-(700hPa)-frontal

- Synoptic-scale ascent at cell locations, but descent at non-cell regions.
- Lower CAPE, dew points and weaker CIN than pre-surface-frontal cells.
- Significantly higher relative humidity at cell locations than non-cell regions.

### Between the surface front and 700 hPa front

- Highest mid-level relative humidity and lowest solar radiation.
- Cells mostly embedded in frontal cloud band.

### Pre-surface-frontal

- Strongest CIN and synoptic-scale lifting at 700 hPa.
- Highest CAPE, surface dew points and surface air temperature.

