

# VORTEX 2 (Version 3.0)

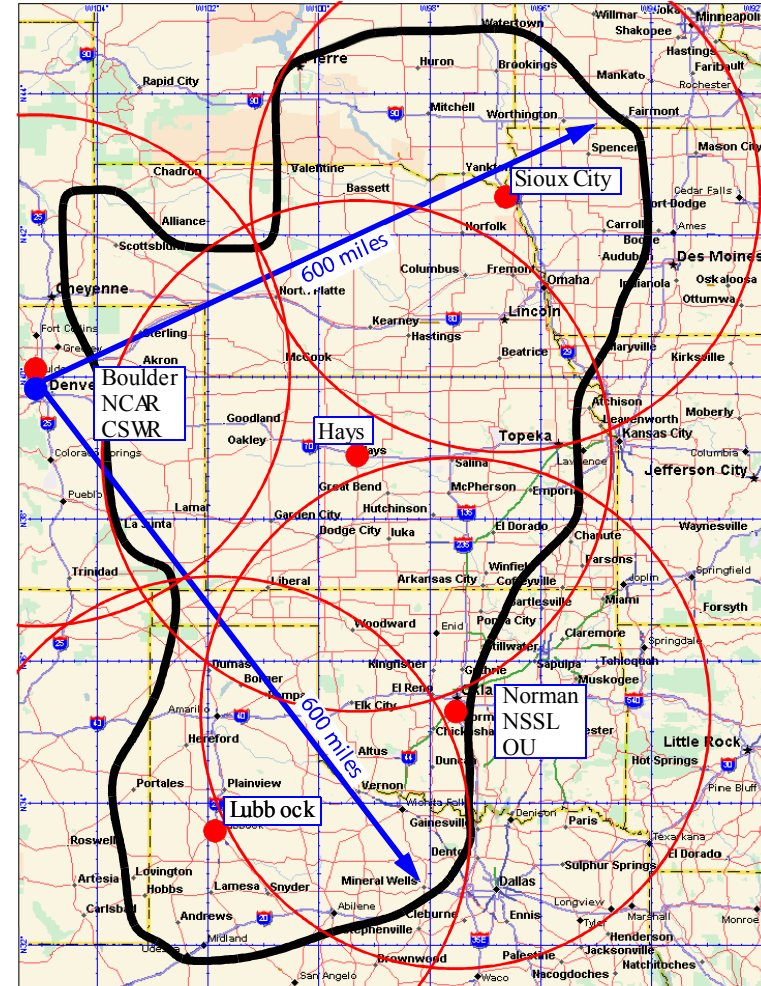
Approved for 2009-10

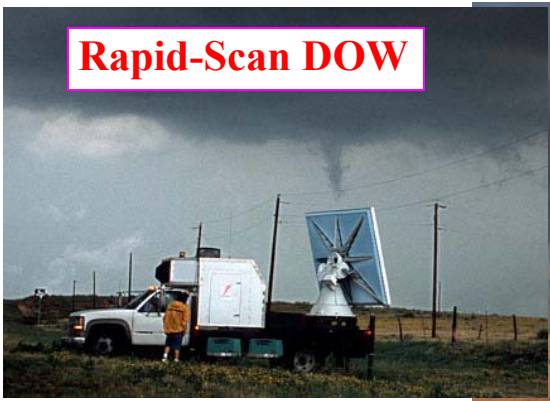
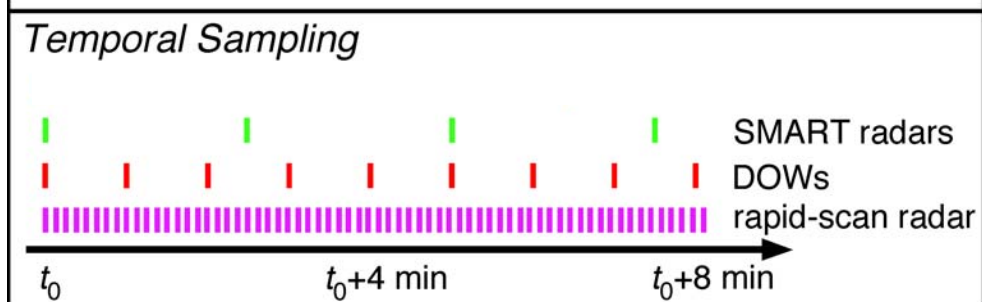
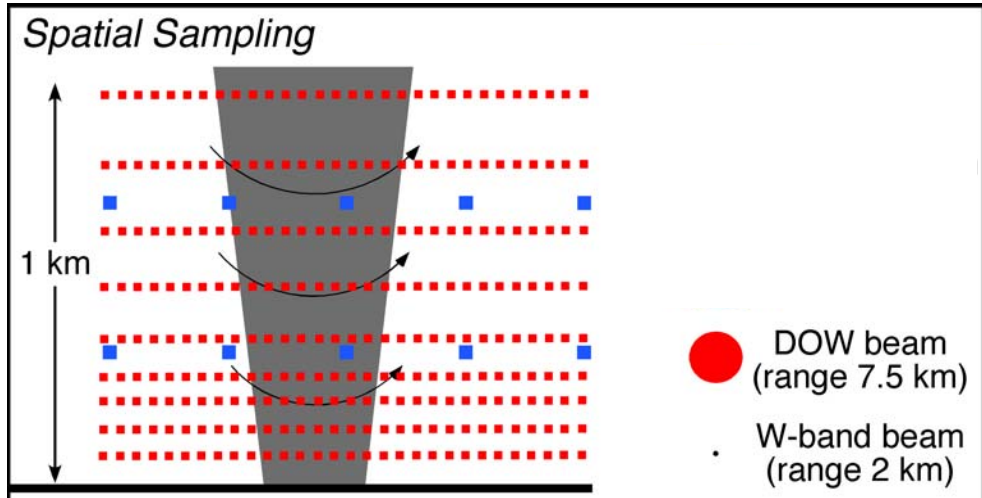
[www.vortex2.org](http://www.vortex2.org) for updates

Steering committee:

- Howie Bluestein, OU
- Don Burgess, CIMMS
- David Dowell, NCAR
- Paul Markowski, PSU
- Erik Rasmussen, CIMMS
- Yvette Richardson, PSU
- Lou Wicker, NSSL
- Joshua Wurman, CSWR

VORTEX2 domain  
multiple ground bases





**A variety of instruments, focusing on mesoscale observations, radar, and direct T, RH, wind**

(others likely to be proposed too)



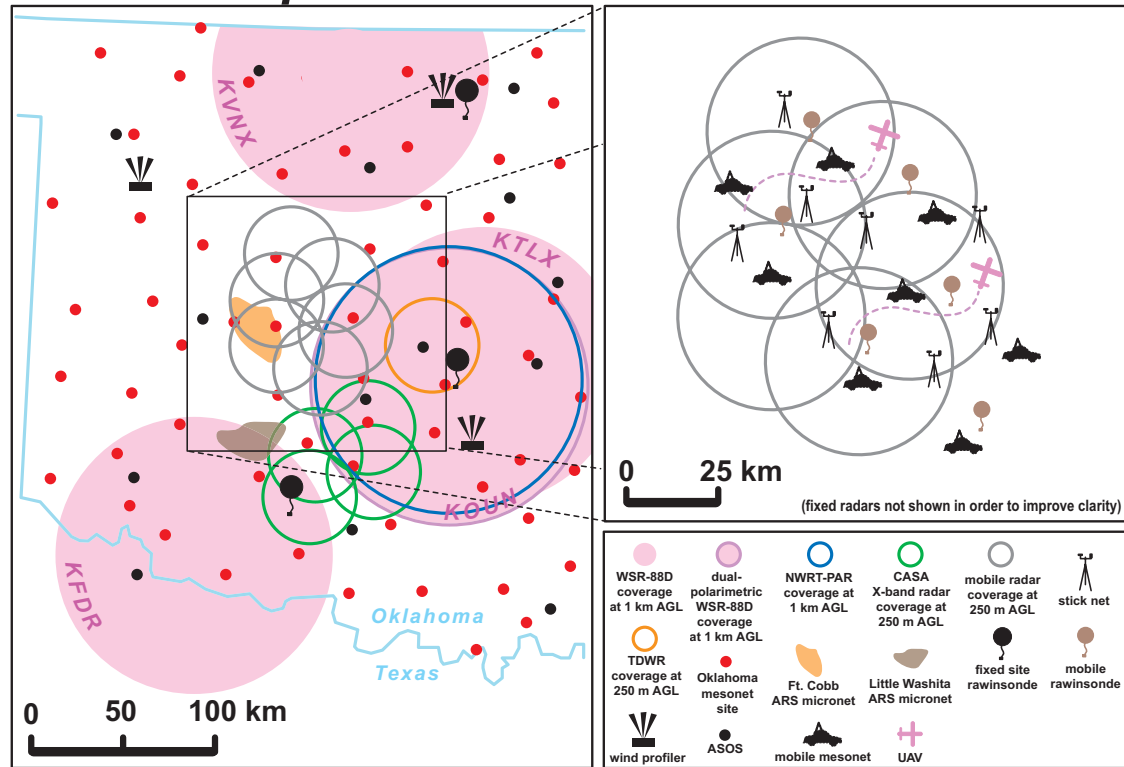
Fig. 3.2 RECUV UAV being readied for flight.

# Tethered Phase, in OK 4/1-5/10

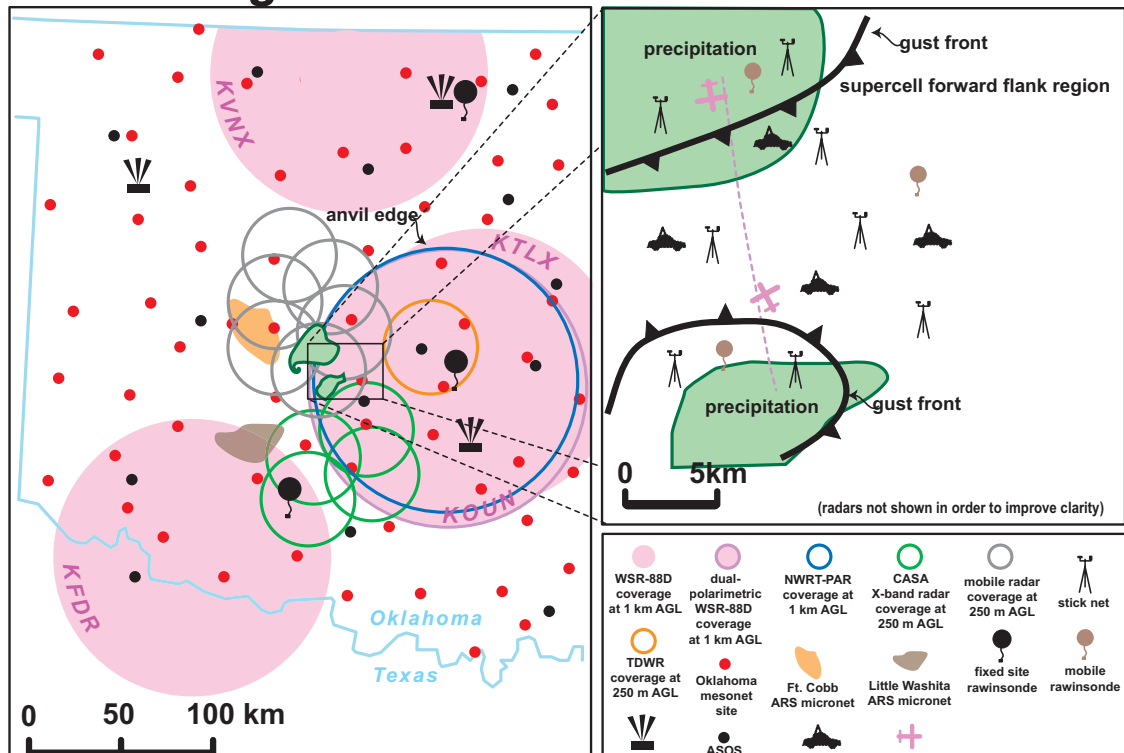
Takes advantage of stationary assets like the Norman Phased-Array CASA, etc.

Studies larger mesoscale

## Tethered pre-storm



## Cell merger

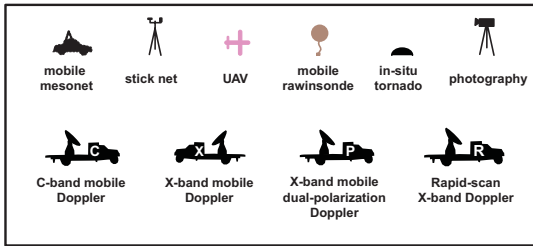


# Fully Mobile Phase

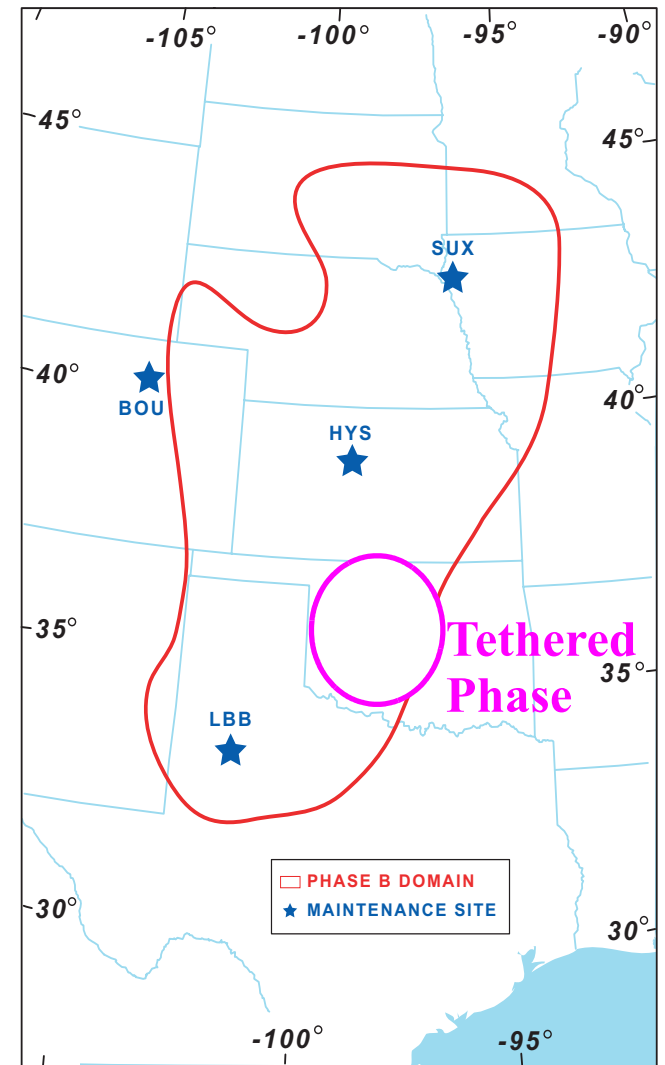
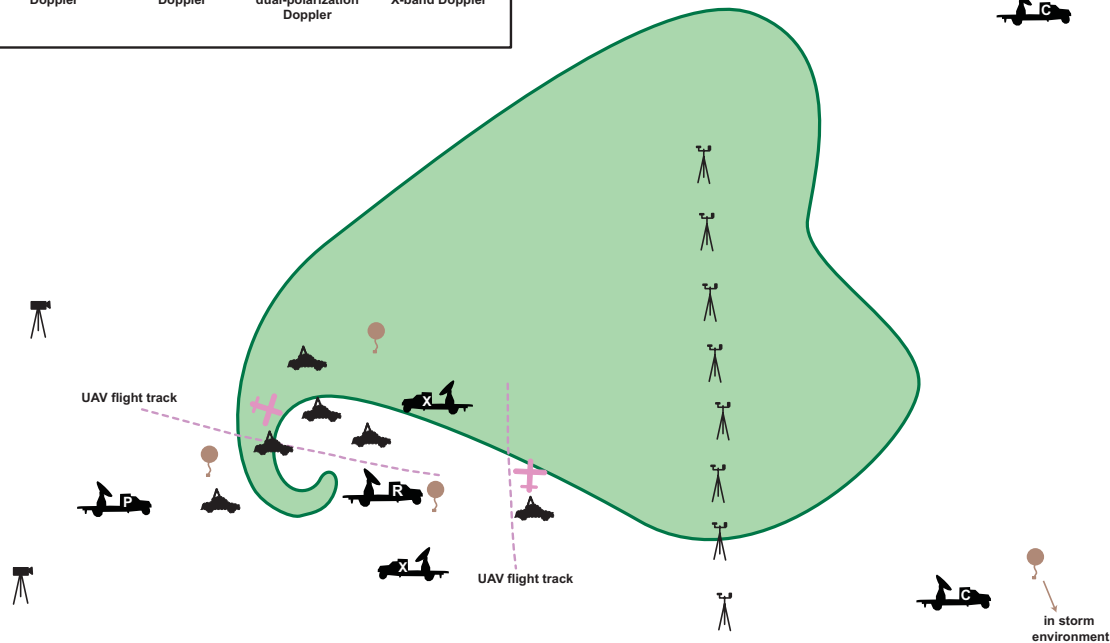
5/11-6/30

Roams the Plains

Studies individual supercells and tornadoes



## Idealized tornadogenesis strategy



# Typical VORTEX2 Experiments

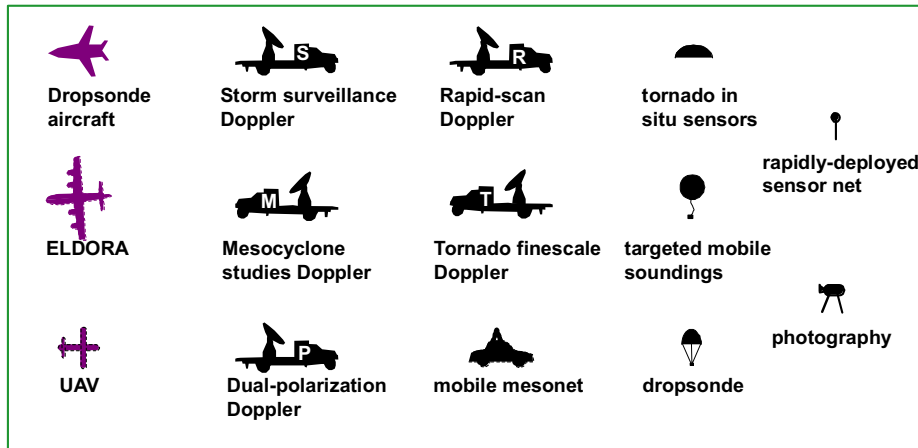
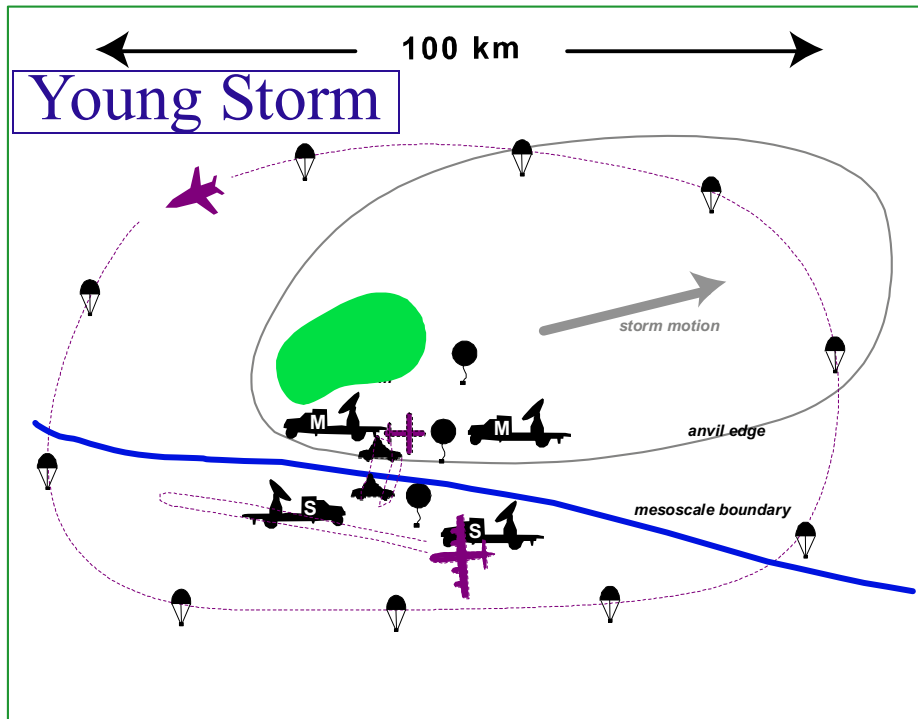


Figure 4.1a. Upper panel: example of a deployment for sampling of storm/environment interactions. Lower panel: Legend for observing system categories shown in the deployments of Figures 4.1-4.5.

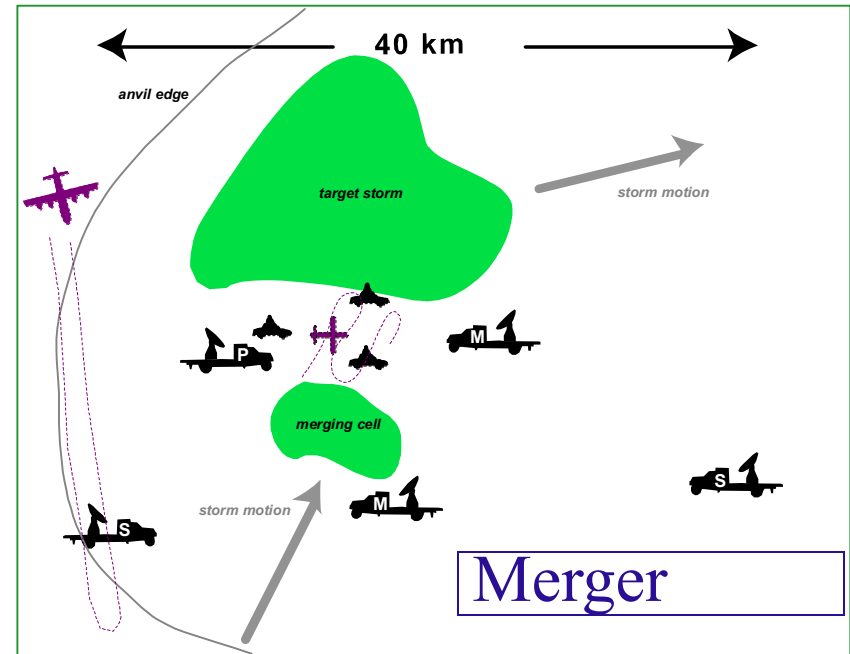


Figure 4.1b. Example of a deployment for observing a storm merger. Most of the platforms not shown are collecting data at other scales or from positions outside of this diagram.

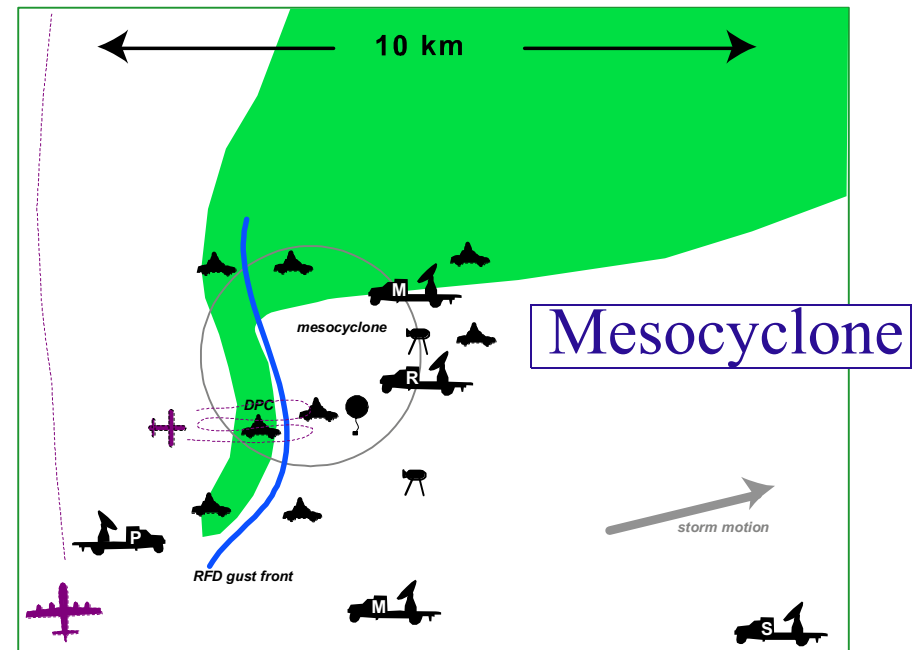


Figure 4.3. Example of a deployment near a mesocyclone. All of the platforms not shown are collecting data at other scales or from positions outside of this diagram.

# A Busy VORTEX2 Afternoon

(Radars only: ~30 other vehicles not shown)

## Mesocyclone Developing

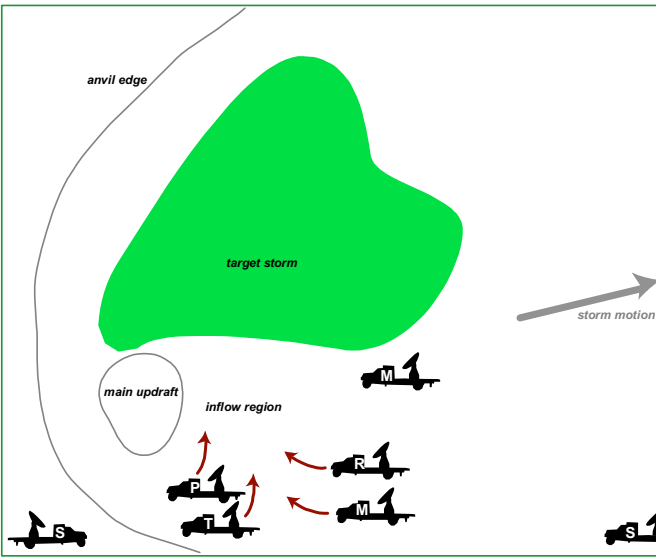


Figure 4.6. Time 1.

## Hook Forming

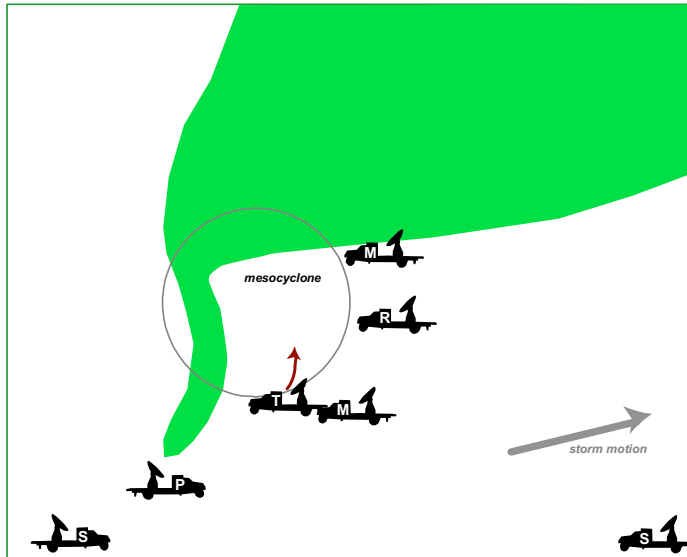


Figure 4.7. Time 2.

## Tornadogenesis

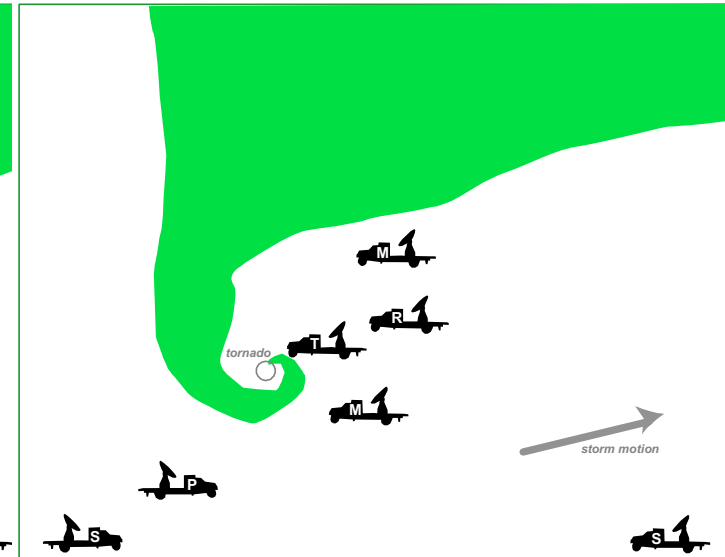


Figure 4.8. Time 3.

## Mature Tornado

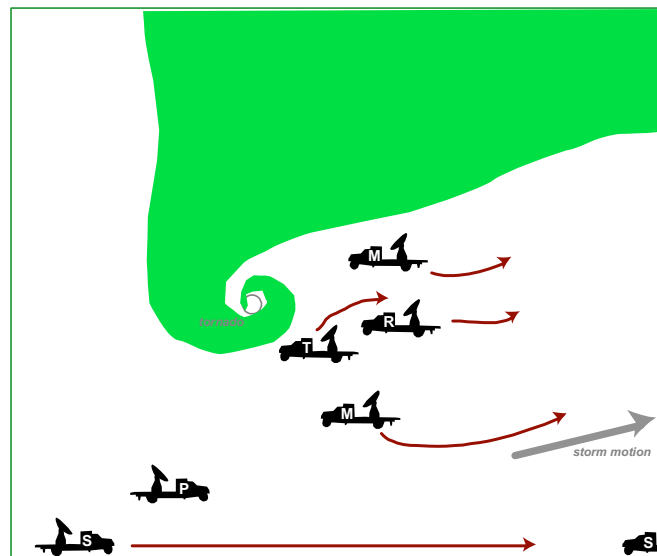


Figure 4.9. Time 4.

## Cyclic Tornadogenesis

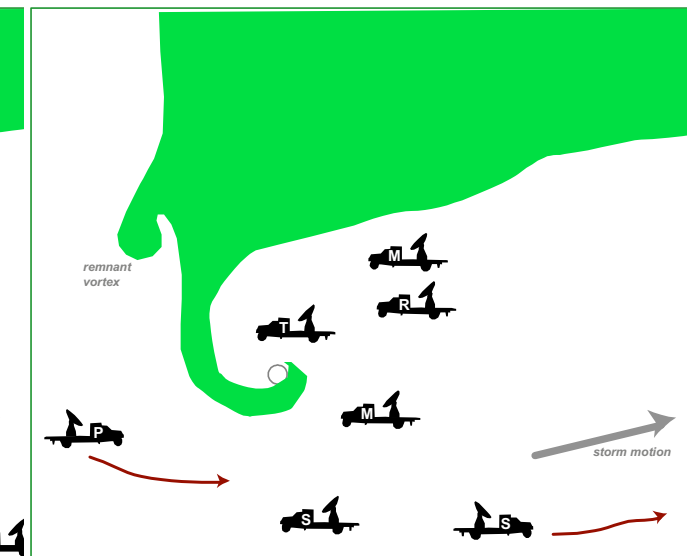


Figure 4.10. Time 5.

## Storm Dissipation, New Storm Forming

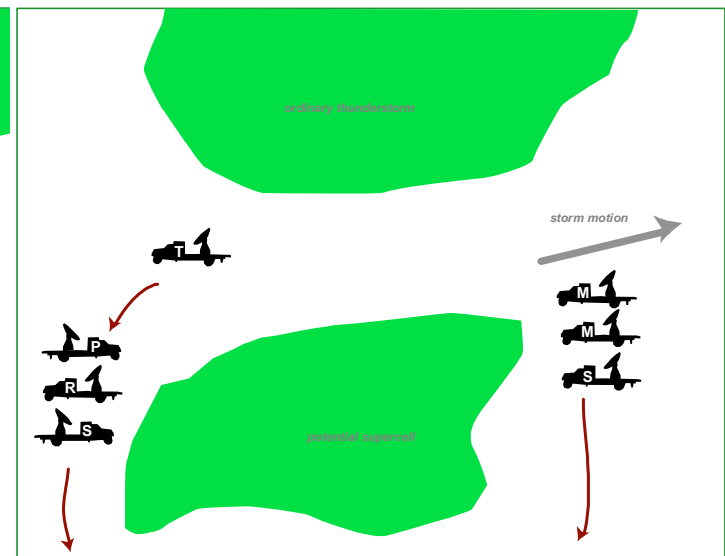


Figure 4.11. Time 6.