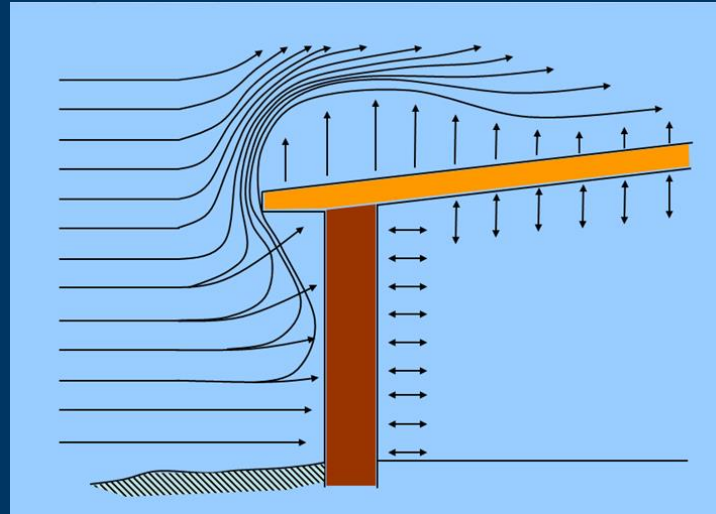


# Lesson 6 – Wind Loads

## Load

- Wind Speed
- Wind Direction
- Angle with Roof
- Wind Pressures



## Resistance

## • Effect

# Wind Velocity / Wind Pressure

- We can measure **some** wind speeds
  - Straight line – weather station instrument  
Local Airport
  - Tornadoes – no
  - Hurricanes – sort of
- Structural Engineers like winds speed because wind speeds can be converter to wind pressures
- Was wind present?



# Storm Prediction Center

Site Map

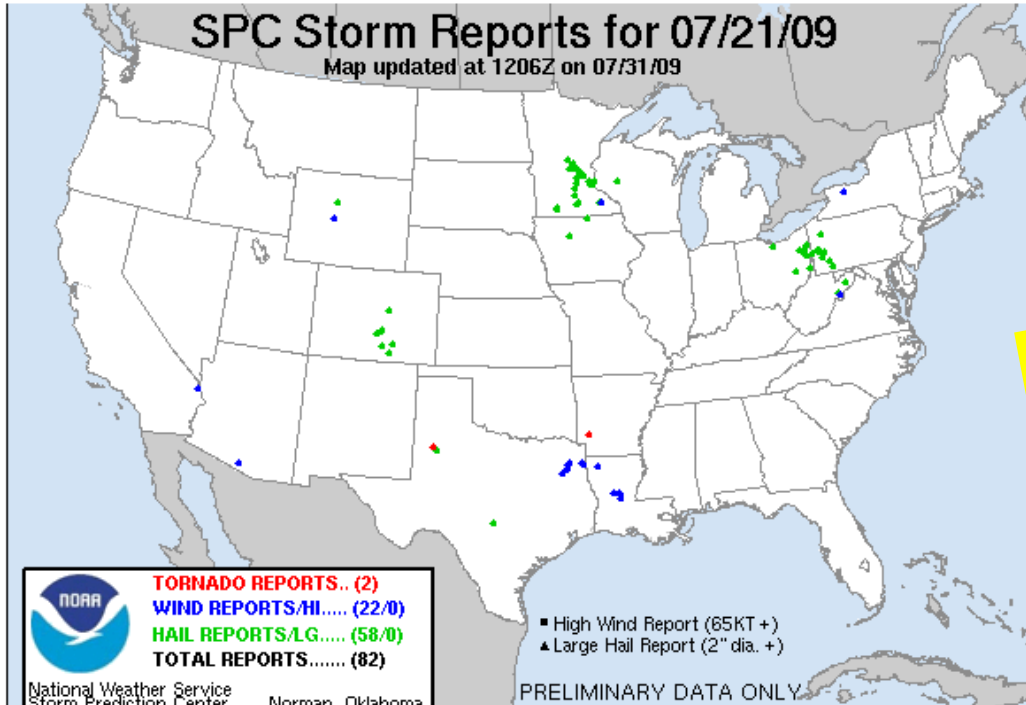
News

Local forecast by "City, St" or "ZIP"

City, St

## 20090721's Storm Report (1200 UTC - 1159 UTC)

< 090720 Reports    090722 Reports >



# Wind and Weather

Yes – Wind was present

Find us on Facebook  
SPC on Facebook

NCEP Quarterly Newsletter

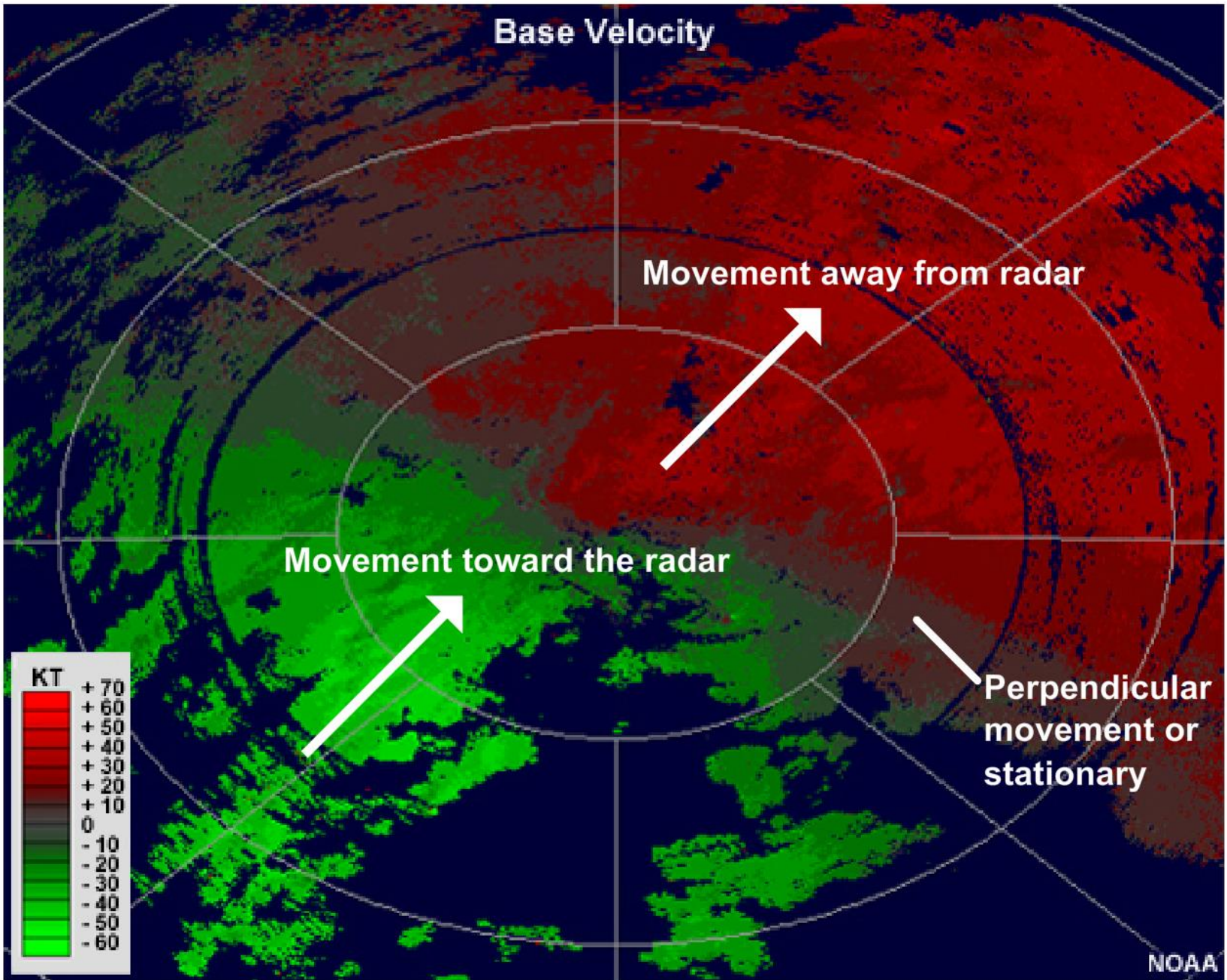
- Home
- SPC Products
- All SPC Forecasts
- Current Watches
- Meso. Discussions
- Conv. Outlooks
- Tstm. Outlooks
- Fire Wx Outlooks
- RSS Feeds
- E-Mail Alerts
- Weather Information
- Storm Reports
- NWS Hazards Map
- Watch/Warning Map
- National RADAR
- Product Archive
- Norman, OK Wx

Wind Reports (in CSV format)							
Time	Speed	Location	County	State	Lat	Lon	Comments
1759	UNK	1 W BOYCE	RAPIDES	LA	3139	9269	PUBLIC REPORTED TREES DOWN 1 MILES WEST OF BOYCE. (LCH)
1815	UNK	4 E LECOMPTE	RAPIDES	LA	3109	9233	TREES DOWN ON HWY 457 4 MILES EAST OF LECOMPTE. (LCH)

# Tornado EF-Scale

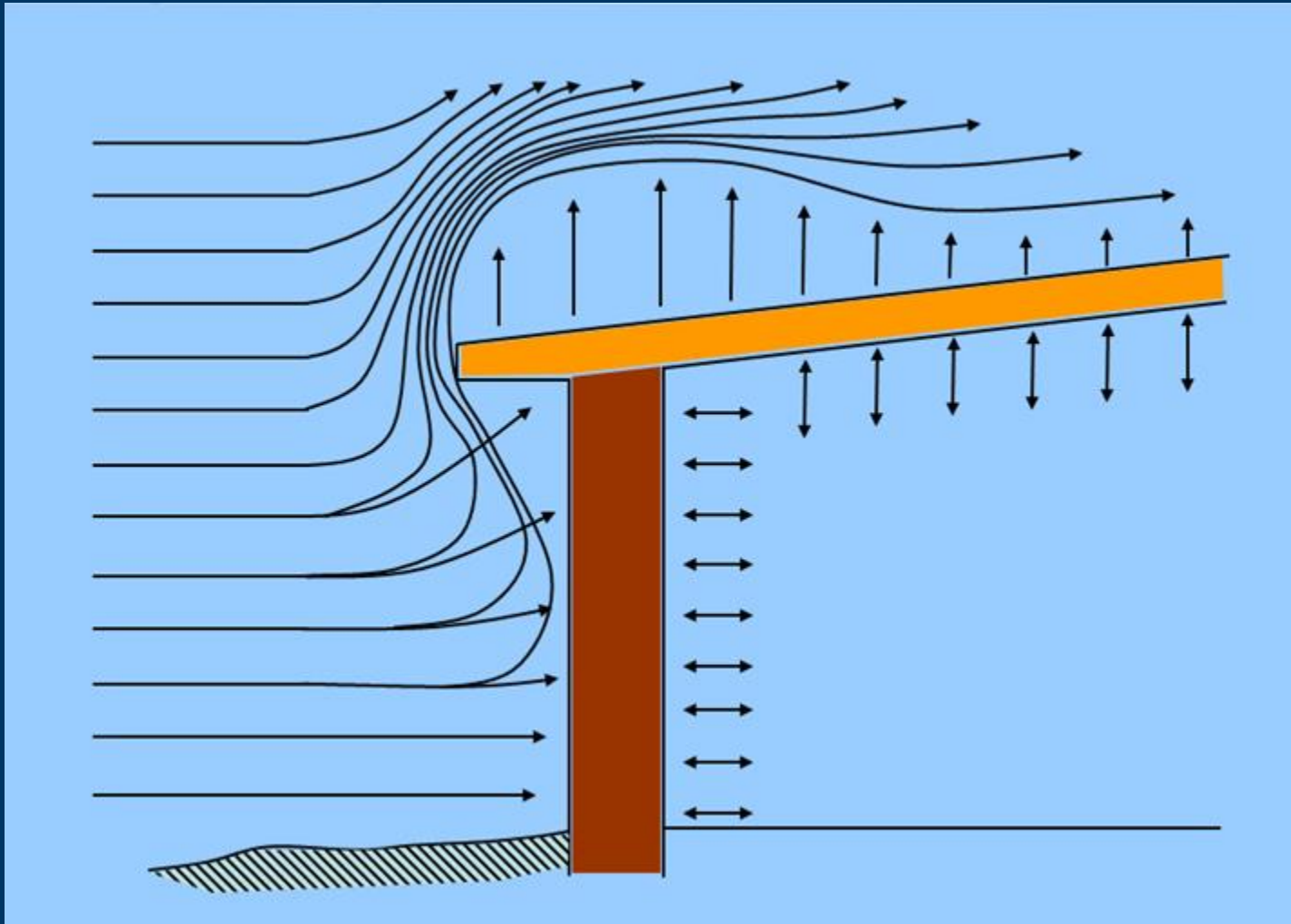
EF-Scale Categories	Wind Speed Ranges
EF0	65-85
EF1	86-110
EF2	111-135
EF3	136-165
EF4	166-200
EF5	>200







# Wind - Uplift Increase at Roof Edge



# Is the damage consistent with known wind behavior?

