

# January 4, 2015, Chatham County GA Tornado

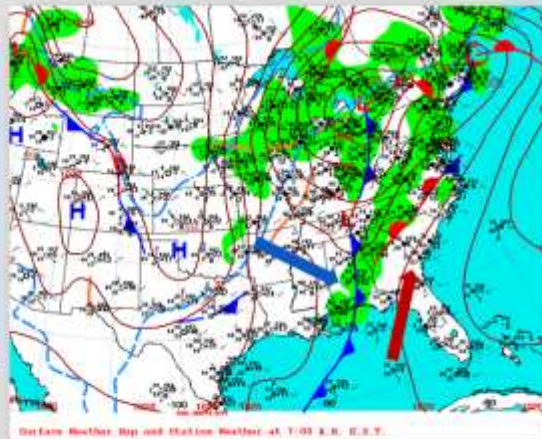
Between 303 pm and 305 pm EST, an EF-1 tornado briefly touched down in Chatham County, Georgia, just southwest of Savannah. Here is a summary of conditions prior to and during this unusual event, including annotated KCLX radar imagery.

## SURFACE CONDITIONS - 7 AM

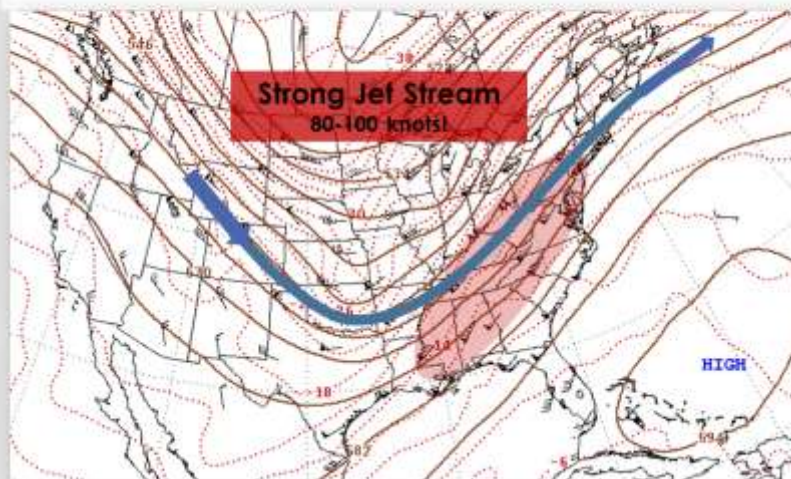
**Cold Front** Moving  
In from West

Ahead of Cold Front,  
**Warm/Moist Air**  
Surges In From South

**Temperatures and  
Dewpoint**  
Temperatures Well  
Above Normal



## UPPER LEVEL CONDITIONS - 7 AM (APPROXIMATELY 20K FT)



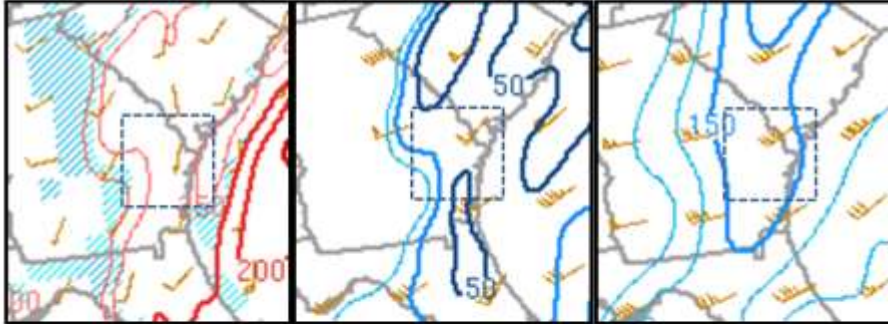
# Mesoscale Environment

Instability, Shear, Helicity from SPC Mesoanalysis  
3pm (20z)

Lifting/Storm Development  
Potential

Rotating Storm/Supercell  
Potential

Rotating Updraft Potential



Surface Instability/CAPE

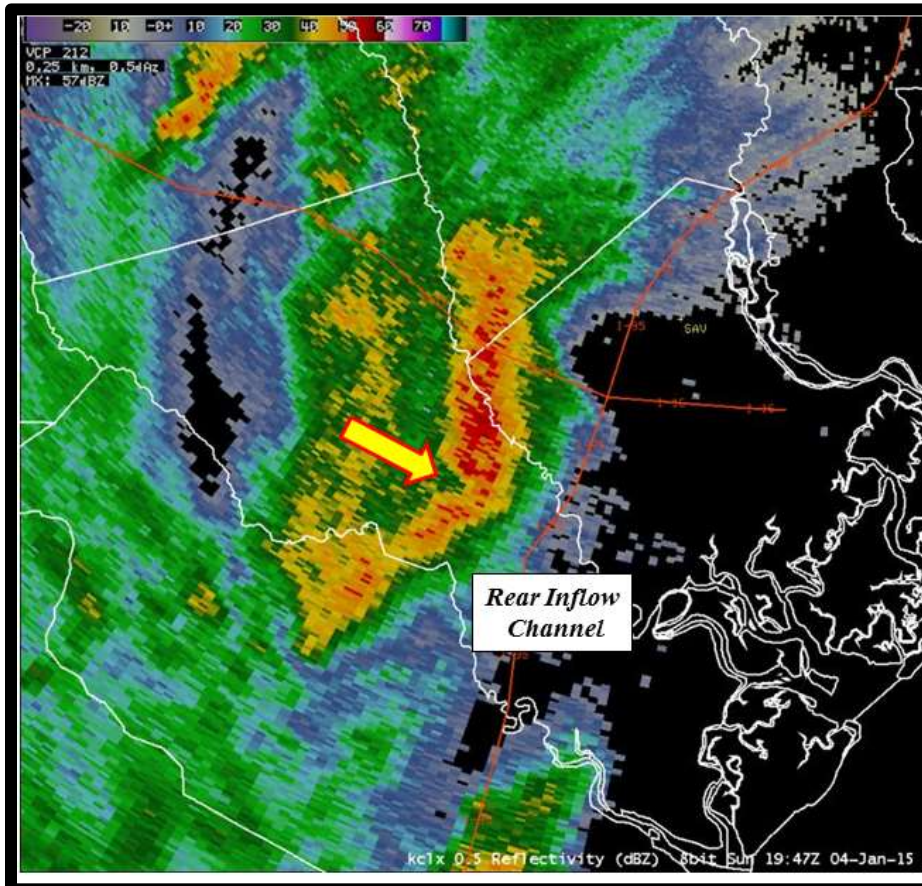
100-200 J/Kg  
Typically require >1000 J/Kg  
for strong/severe storms

Bulk Shear 0-6 km

40-50 Kts  
Supercells more probable  
When shear 40 kts or stronger

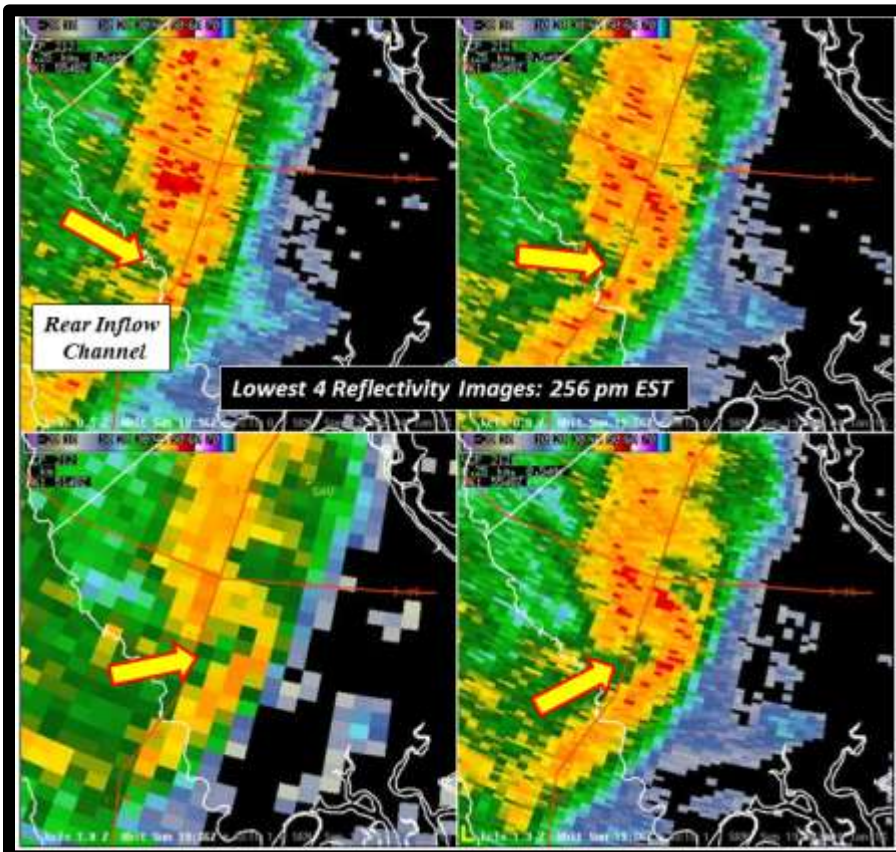
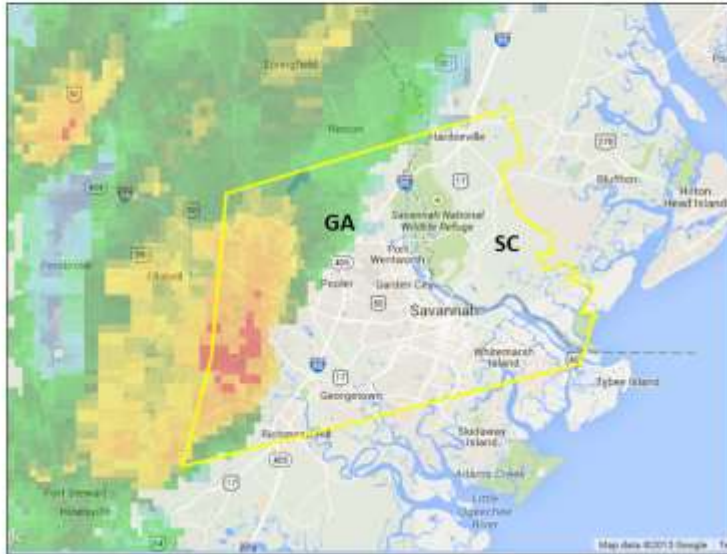
SFC-1km SR Helicity

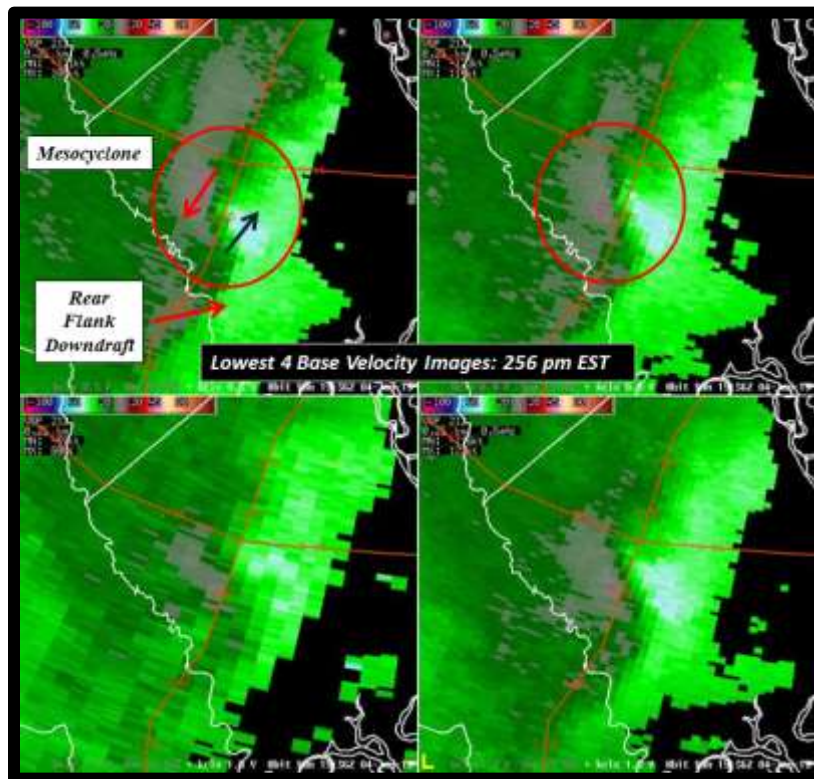
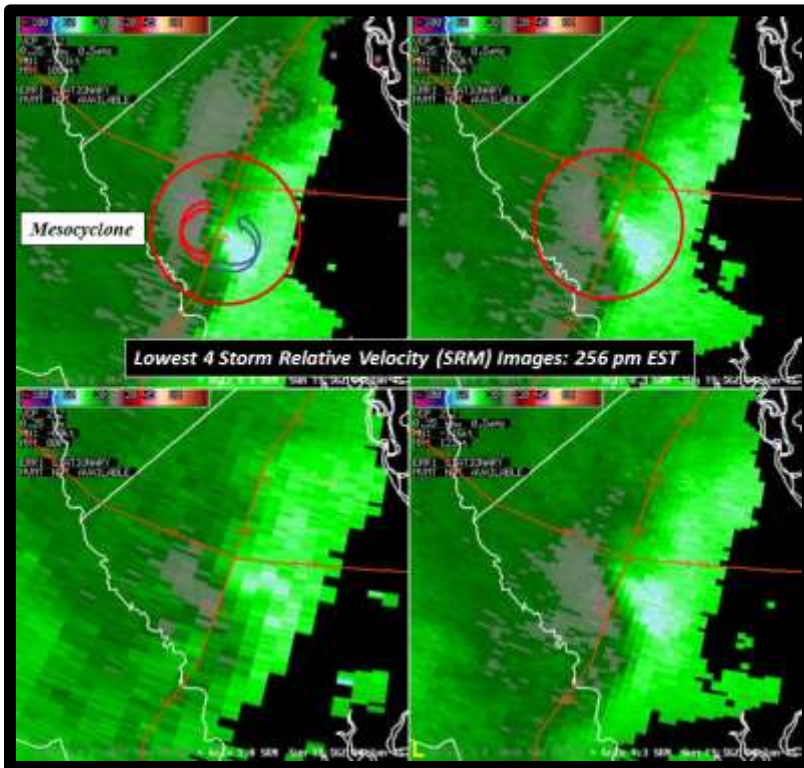
150-200  $m^2/s^2$   
Supercell tornadoes more  
probable when values >100

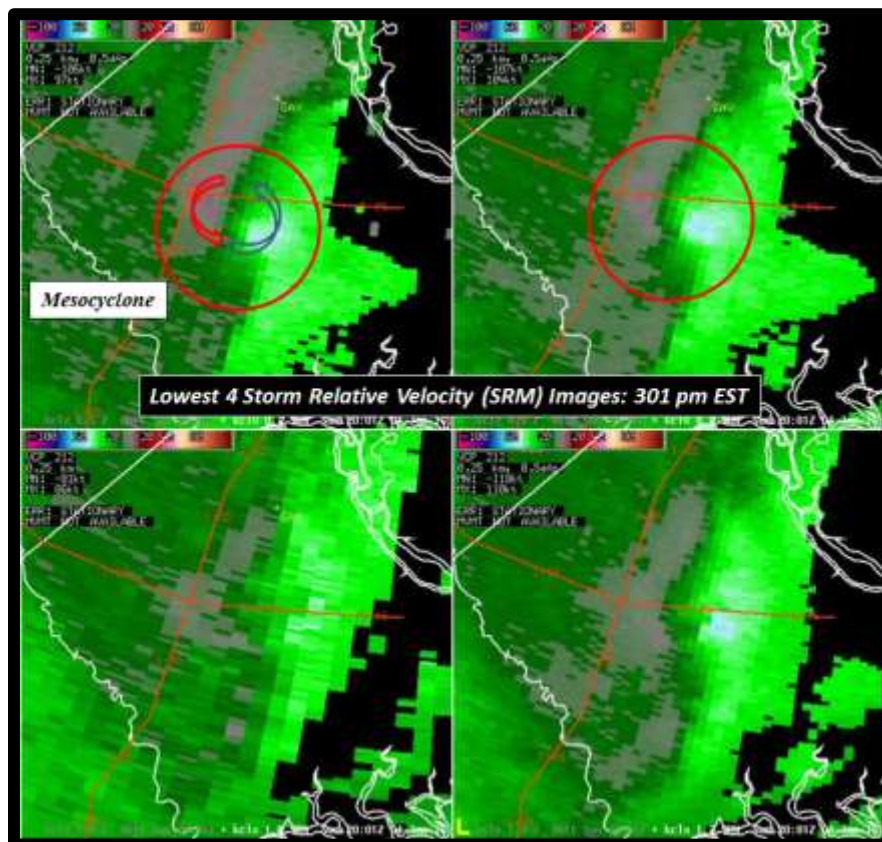
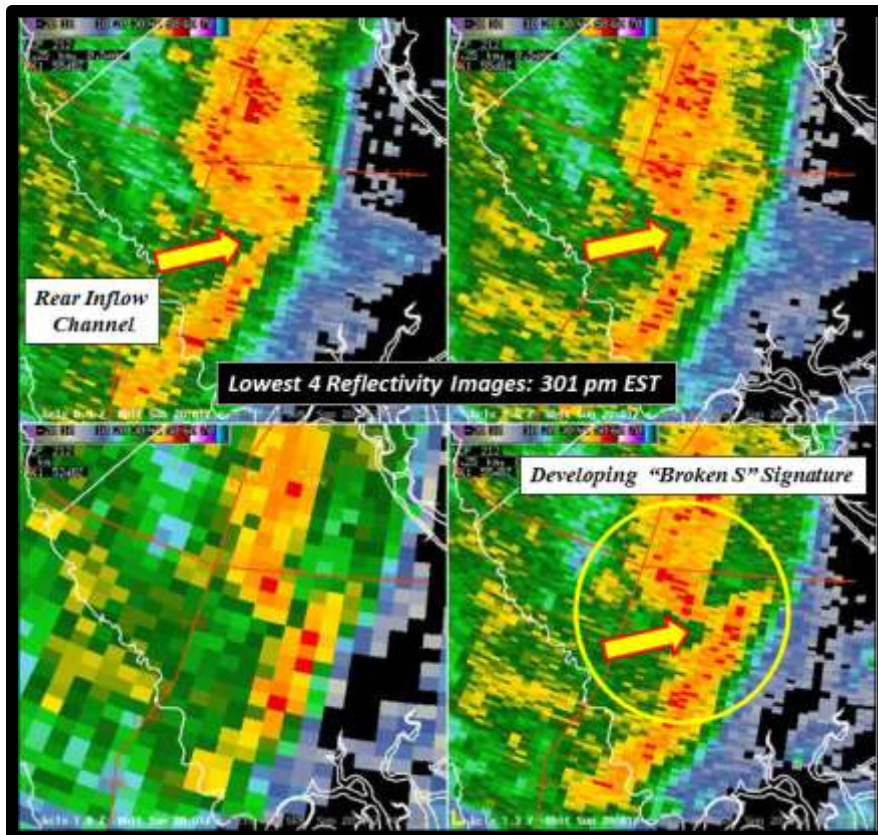


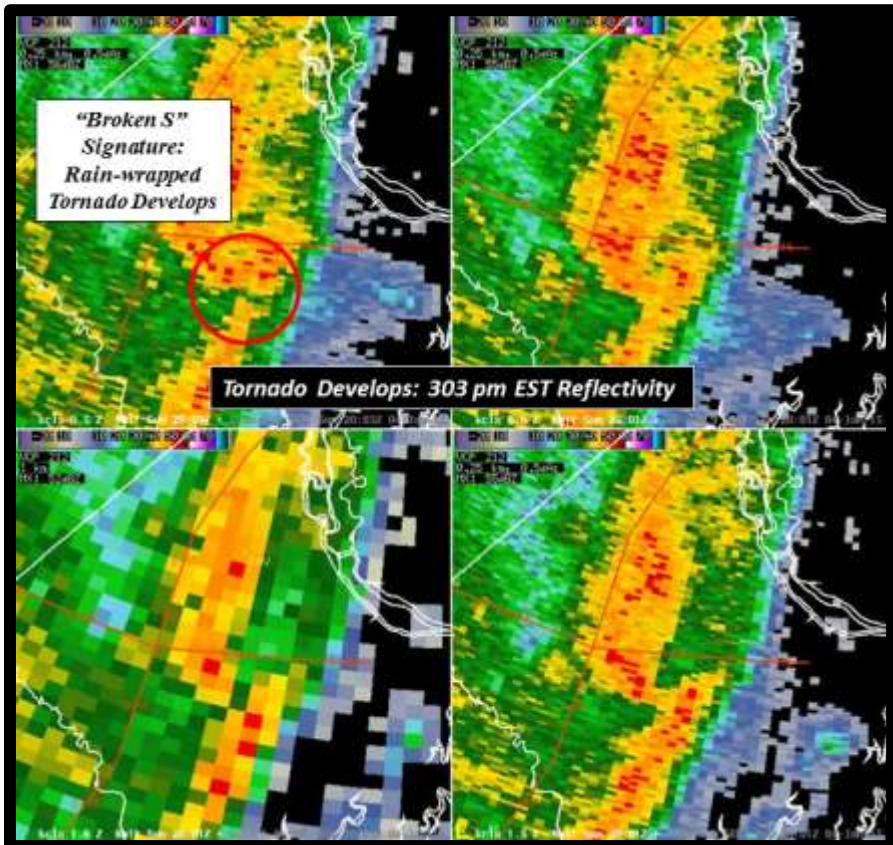
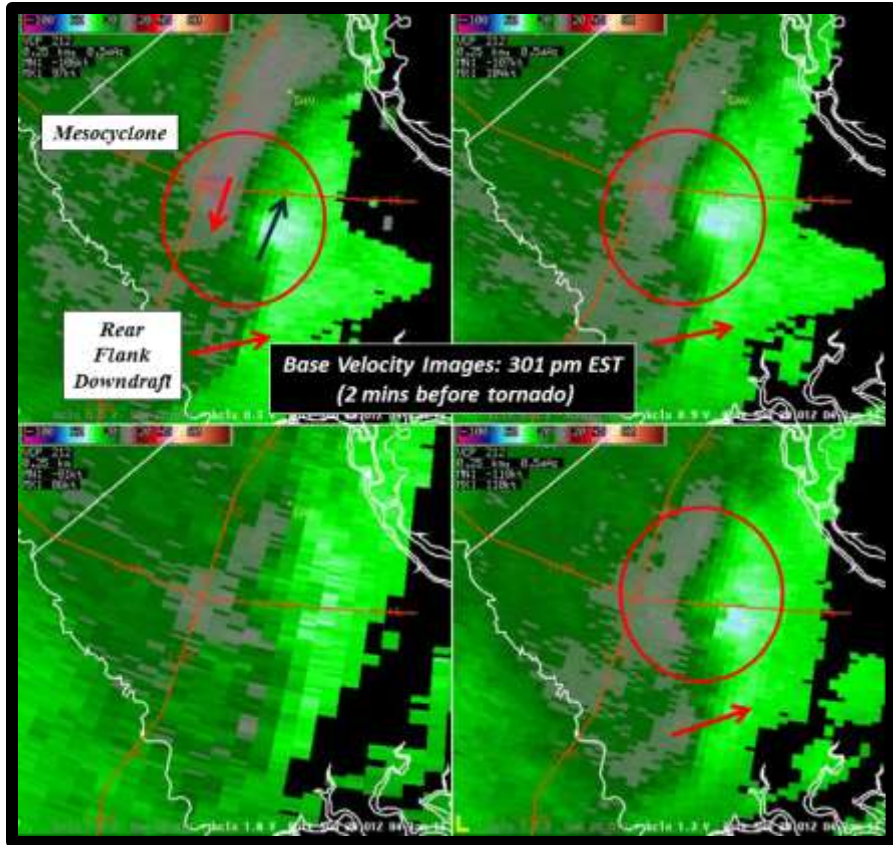
# Severe Thunderstorm Warning

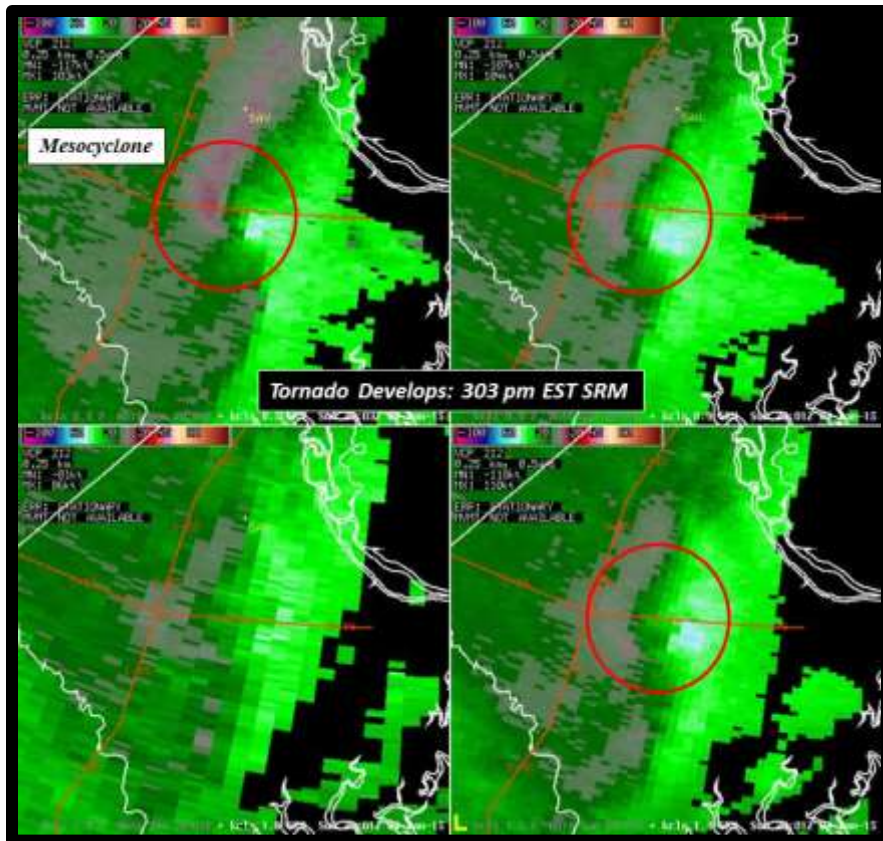
Issued 250 pm





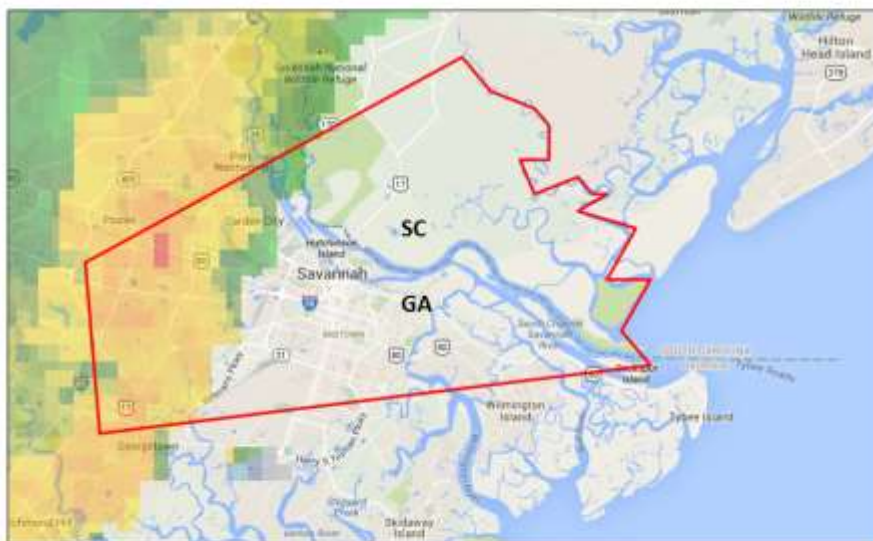


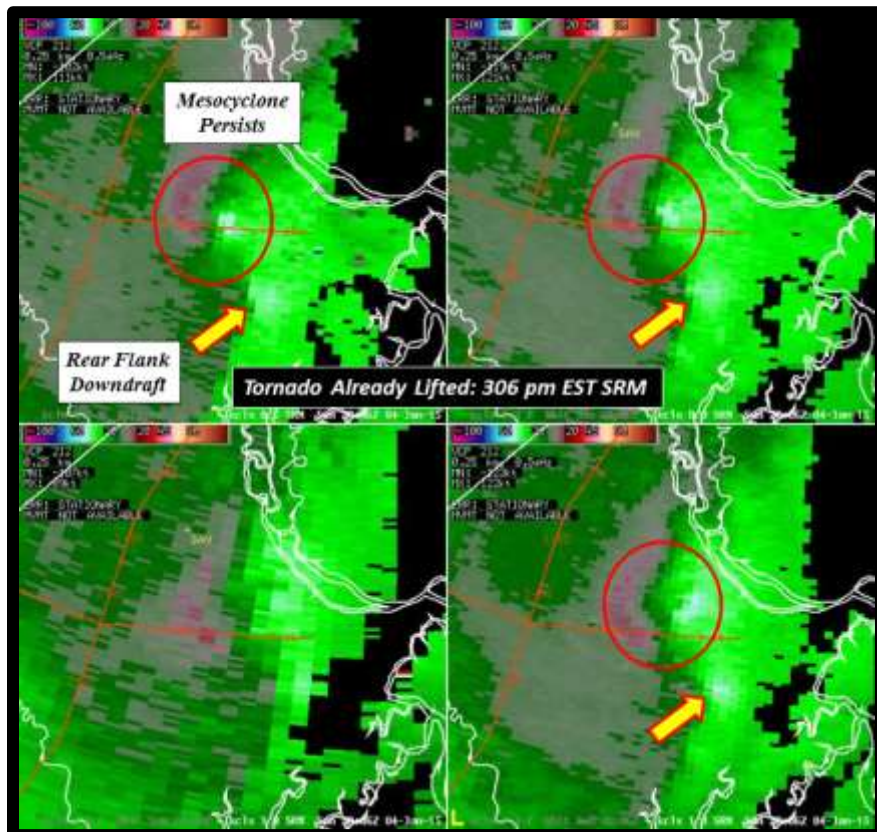
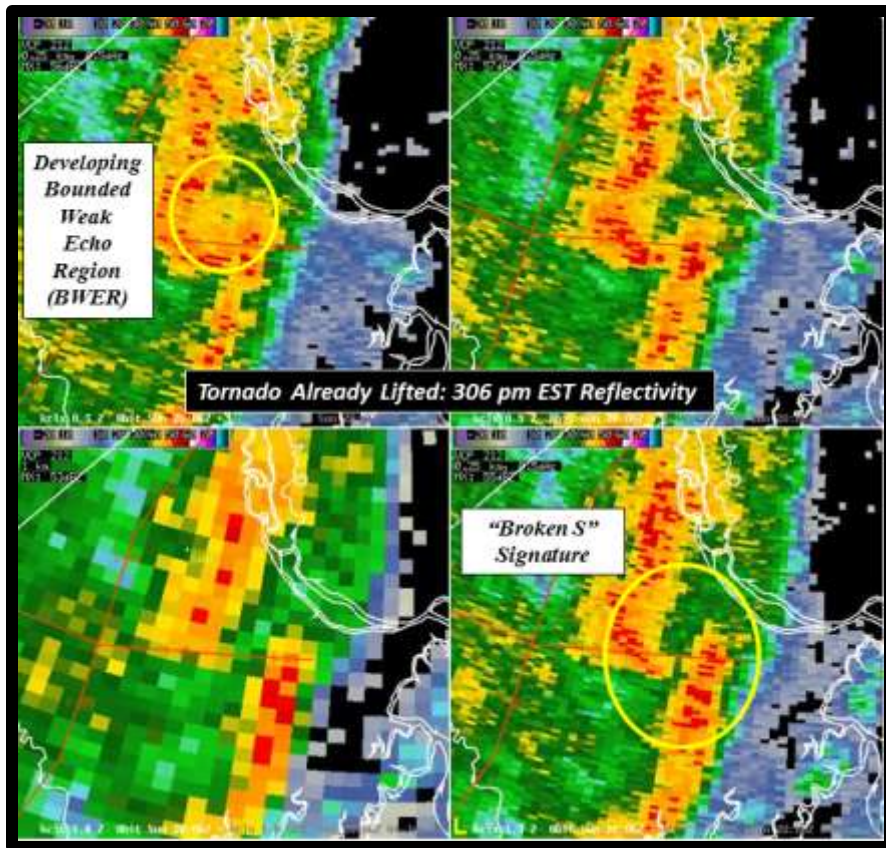




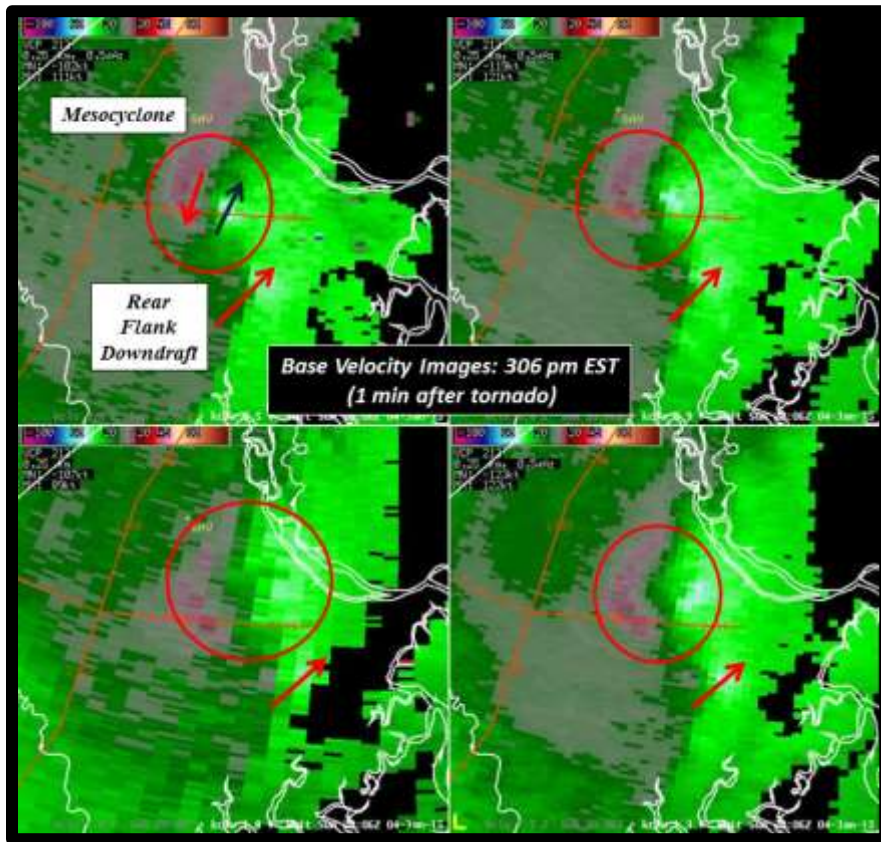
## Tornado Warning

Issued 303 pm









PUBLIC INFORMATION STATEMENT  
 NATIONAL WEATHER SERVICE CHARLESTON SC  
 736 PM EST TUE JAN 6 2015

...TORNADO CONFIRMED IN THE SAVANNAH AREA...

LOCATION...SAVANNAH IN CHATHAM COUNTY GEORGIA  
 DATE...JANUARY 4 2015  
 ESTIMATED TIME...303 PM TO 305 PM EST  
 MAXIMUM EF-SCALE RATING...EF-1  
 ESTIMATED MAXIMUM WIND SPEED...85-95 MPH  
 MAXIMUM PATH WIDTH...0.25 MILE  
 PATH LENGTH...3 MILES  
 BEGINNING LAT/LON...32.0365N / -81.2301W  
 ENDING LAT/LON...32.0572N / -81.1851 W  
 \* FATALITIES...0  
 \* INJURIES...0

\* THE INFORMATION IN THIS STATEMENT IS PRELIMINARY AND SUBJECT TO CHANGE PENDING FINAL REVIEW OF THE EVENT(S) AND PUBLICATION IN NWS STORM DATA.

...SUMMARY...

THE NATIONAL WEATHER SERVICE IN CHARLESTON SC HAS CONFIRMED A TORNADO AFFECTED PORTIONS OF THE SAVANNAH METRO AREA ON JANUARY 4 2015.

THE TORNADO INITIALLY TOUCHED DOWN NEAR THE INTERSECTION OF BERWICK BOULEVARD AND STONEBRIDGE CIRCLE AND MOVED QUICKLY NORTHEAST THROUGH THE STONEBRIDGE NEIGHBORHOOD. THE TORNADO RIPPED NUMEROUS SHINGLES AND VINYL SIDING PANELS OFF A NUMBER OF HOUSES AND DAMAGED SEVERAL LARGE WOODEN FENCES. A GAZEBO WAS DAMAGED AND A TRAMPOLINE WAS LIFTED AND THROWN FOR ABOUT 1/4 OF A MILE. HIGH WINDS FORCED RAINWATER THROUGH THE WALLS OF ONE HOME AND DAMAGED THE DRYWALL AND CARPET. SEVERAL LARGE TREES WERE BLOWN OVER AND SNAPPED. QUITE A BIT OF DEBRIS WAS NOTED HANGING IN THE TREES IN THE BACK OF THE NEIGHBORHOOD. ONE AIR CONDITIONER UNIT WAS LIFTED AND MOVED SEVERAL FEET.

THE TORNADO THEN LIFTED AND PERIODICALLY TOUCHED DOWN BETWEEN ELK ROAD...MOOSE JAW ROAD AND SALT CREEK ROAD FOR A TOTAL PATH LENGTH OF 3 MILES. IN THESE AREAS...LARGE TREES WERE EITHER BLOWN DOWN OR SNAPPED...INCLUDING MANY LARGE GRAND OAK TREES. TWO HOMES WERE DAMAGED BY FALLING TREES. NO INJURIES OR DEATHS WERE REPORTED.

TREES AND POWERLINES REPORTED DOWN SOUTH OF THE TORNADO TRACK INTO THE HUNTER ARMY AIRFIELD AREA WERE CAUSED BY HIGH STRAIGHT LINE WINDS AND NOT A TORNADO.

THIS INFORMATION CAN ALSO BE FOUND ON OUR WEBSITE AT WEATHER.GOV/CHS.

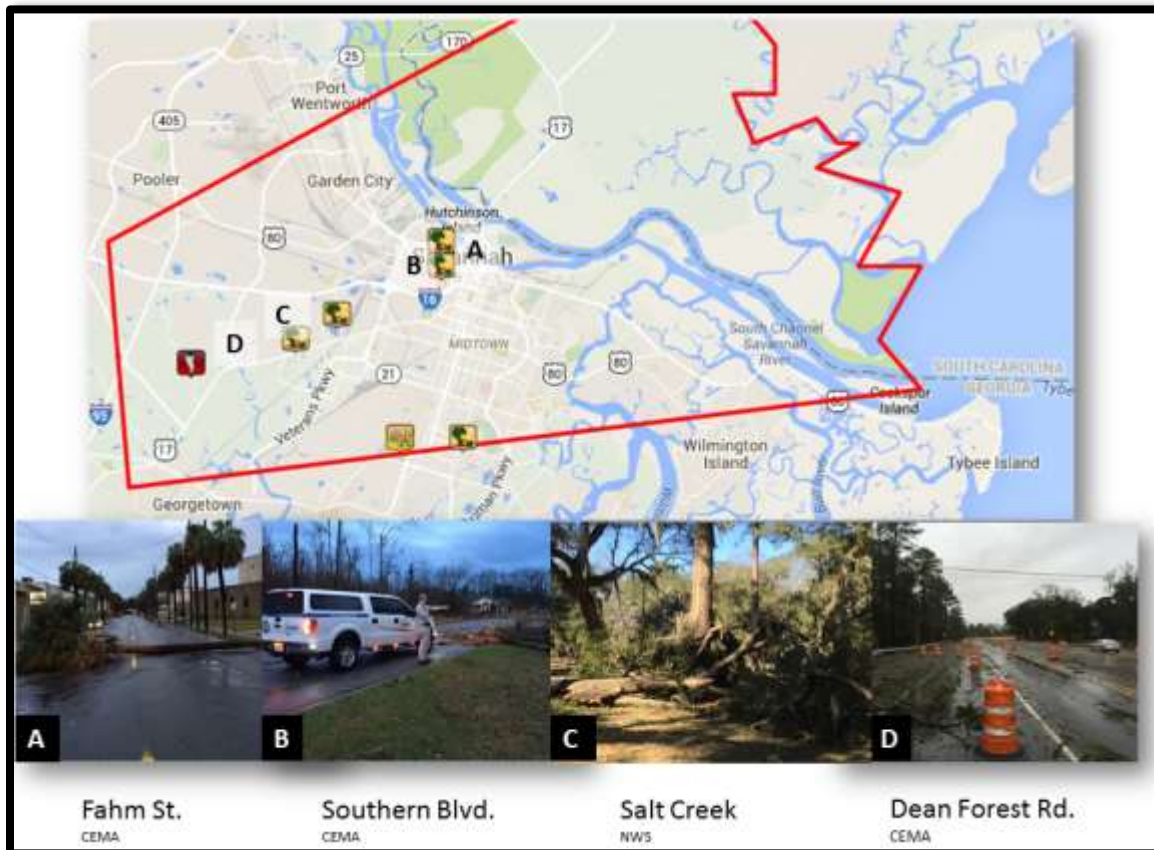
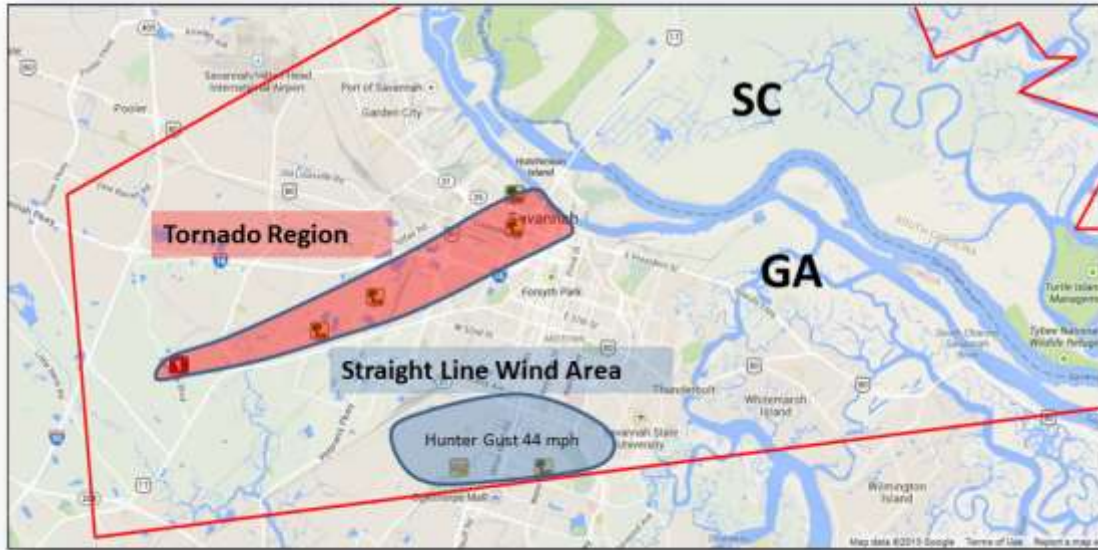
FOR REFERENCE...THE ENHANCED FUJITA SCALE CLASSIFIES TORNADOES INTO THE FOLLOWING CATEGORIES:

EF0...WIND SPEEDS 65 TO 85 MPH.  
EF1...WIND SPEEDS 86 TO 110 MPH.  
EF2...WIND SPEEDS 111 TO 135 MPH.  
EF3...WIND SPEEDS 136 TO 165 MPH.  
EF4...WIND SPEEDS 166 TO 200 MPH.  
EF5...WIND SPEEDS GREATER THAN 200 MPH.

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ST/RFM

# Damage Area and Reports





Photos by NWS  
Survey Team



**Very brief F0/F1 (85-95 mph), on ground approx.**  
1 mile, mainly in Stonebridge, moving 45-50 mph.

**Damage:** Shingle, siding, fascia and fence to 15-20