



**NATIONAL WEATHER SERVICE**

**Building a Weather-Ready Nation**

**San Angelo Hail Storm**

**5/23/2024**

**Wind Damage/Cross Plains Tornado**

**5/25/2024**

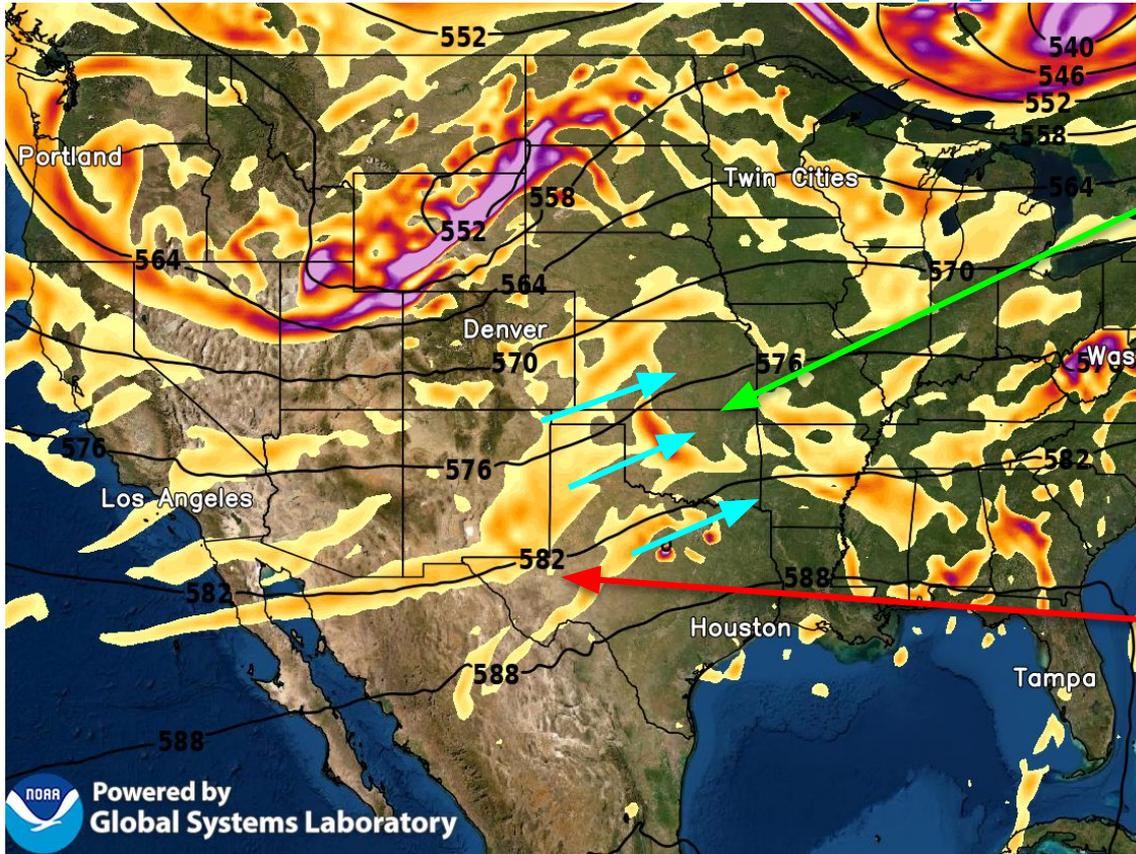
NWS San Angelo

# Overview

- A severe thunderstorm moved through the San Angelo area on 5/23, bringing baseball size hail and 73 mph winds, causing widespread damage in the city.
- Severe storms during the afternoon and overnight periods of 5/25 produced wind damage, as well as a couple tornadoes



# Weather Pattern - Upper Levels



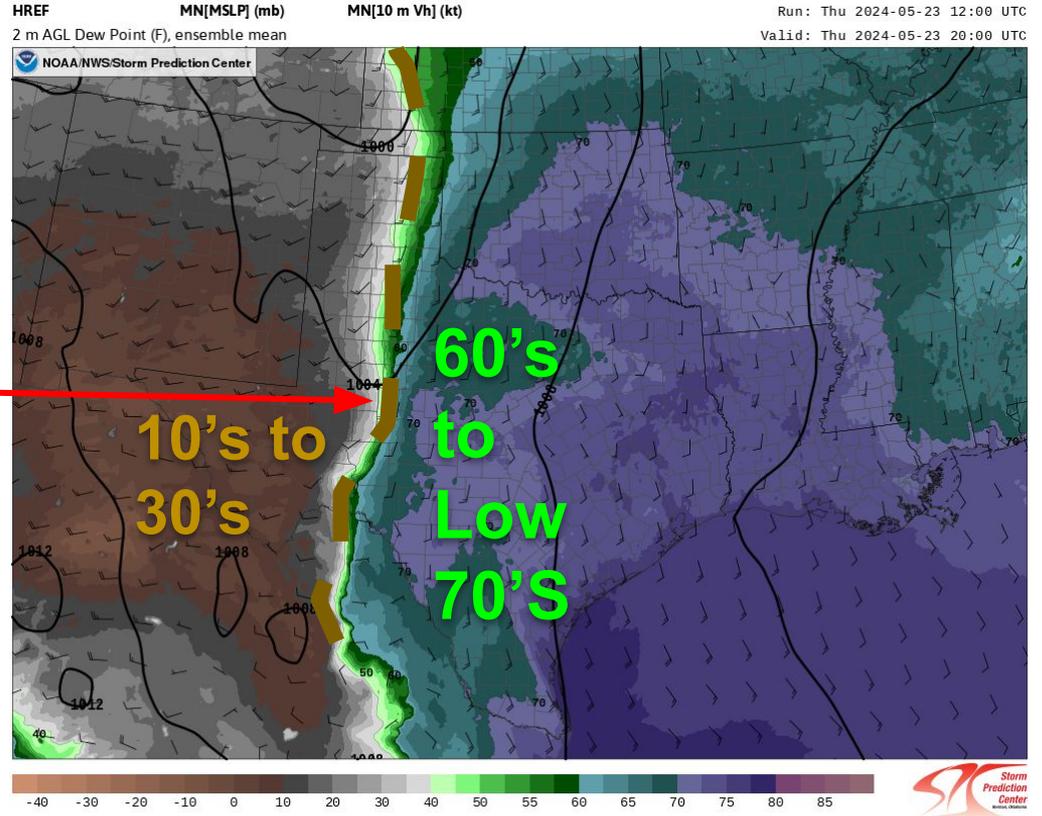
Southwest Flow  
Aloft

Weak upper level  
disturbance helps  
bring some lift to  
the region

500mb Heights (black lines) and Vorticity (colors)

# Weather Pattern - Surface

Strong Dry-line centered across West Central Texas, which results in strong convergence and a focal point for storm development

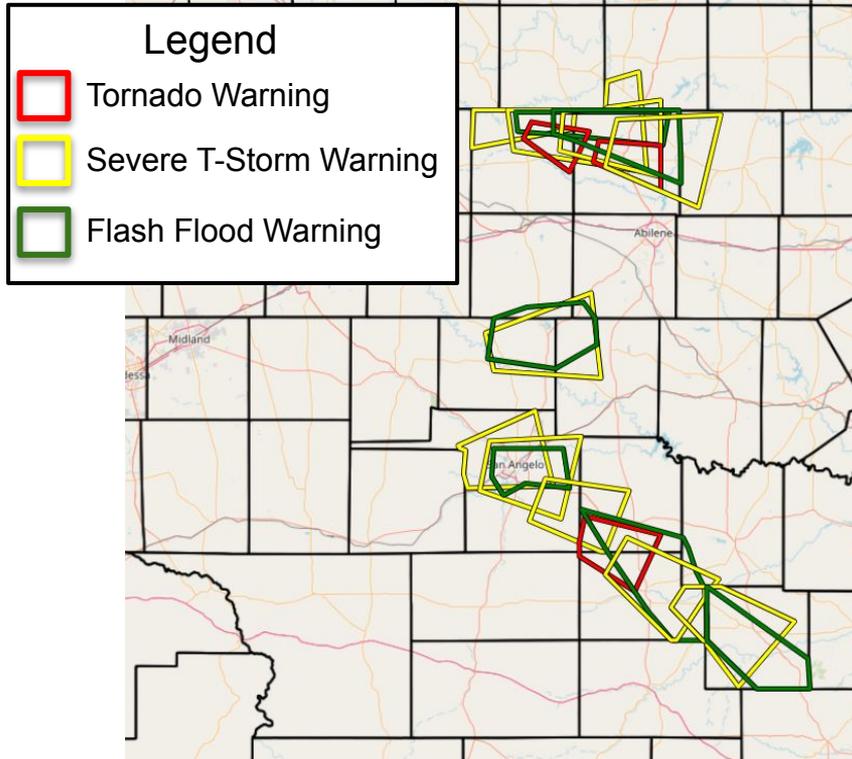


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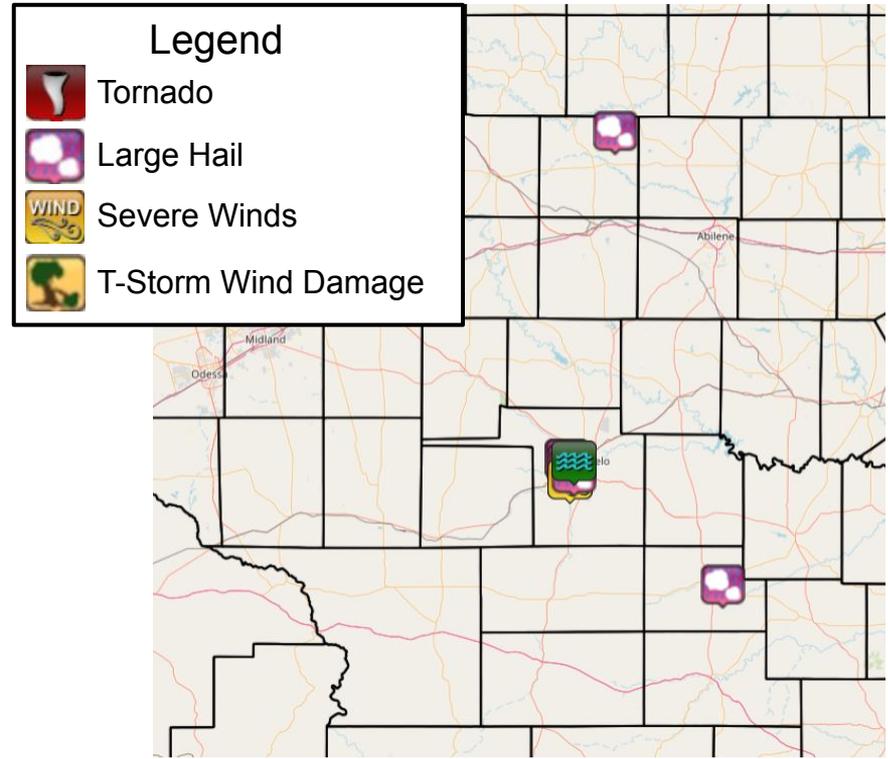
Surface Dewpoint (colors) and  
Surface Mean Sea Level Pressure (black lines)

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# Warnings and Storm Reports - May 23



**Warnings Issued**



**Storm Reports**

# Warnings - May 23 - San Angelo Area

## Severe T-Storm Warning (BASE)

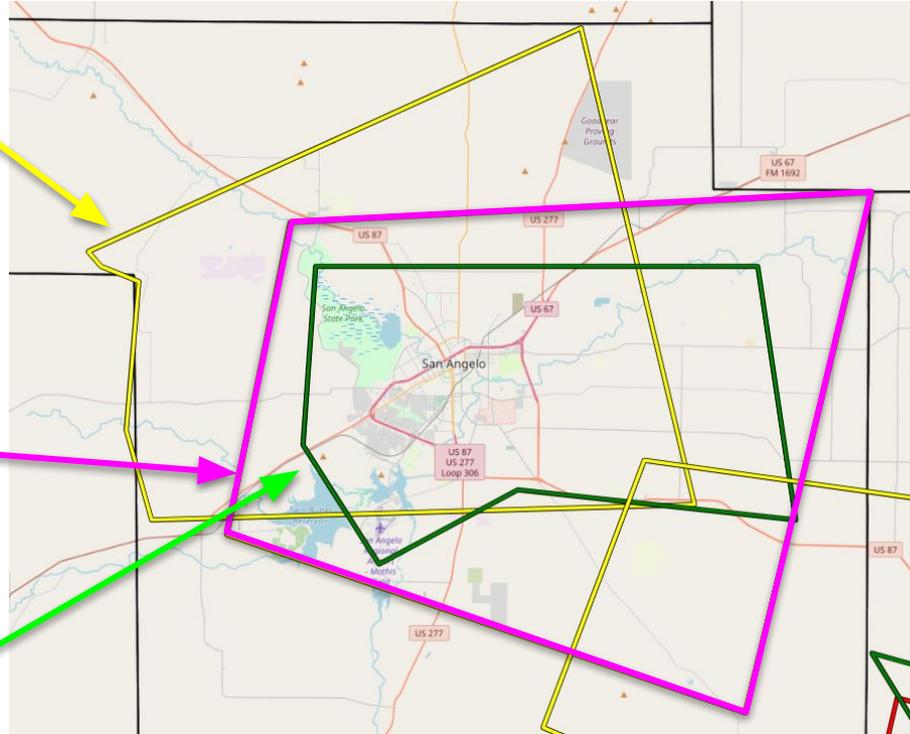
- Ping Pong ball size hail and 60 mph winds
- Issued at 4:30 pm
- Effective through 5:15pm

## Severe T-Storm Warning (DESTRUCTIVE)

- Baseball Size Hail and 70 mph Winds
- Issued at 4:53 pm
- Effective through 5:45pm

## Flash Flood Warning

- Issued at 5:04 pm
- Effective through 7:00pm



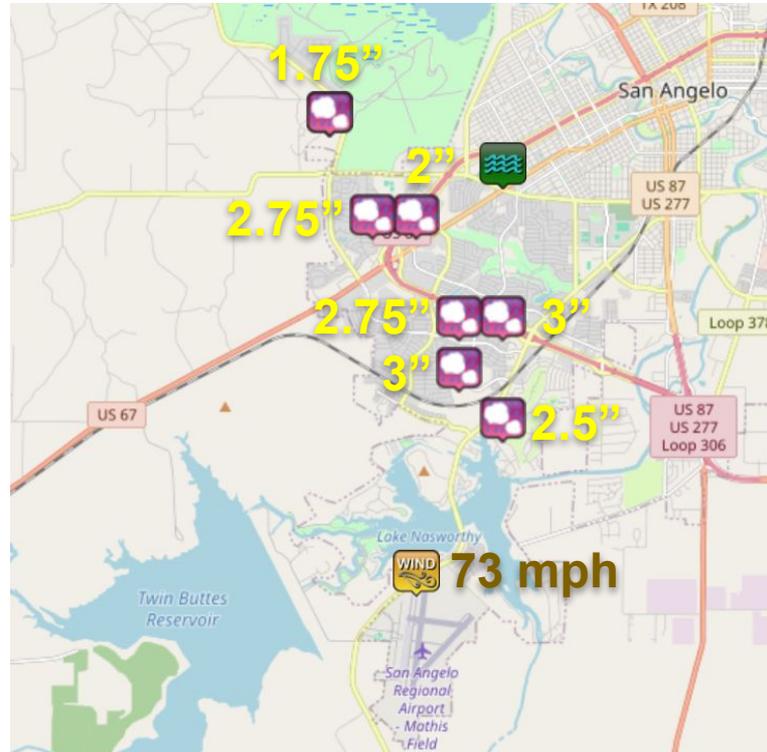
## Warnings Issued



# Storm Reports - May 23 - San Angelo Area

**Legend**

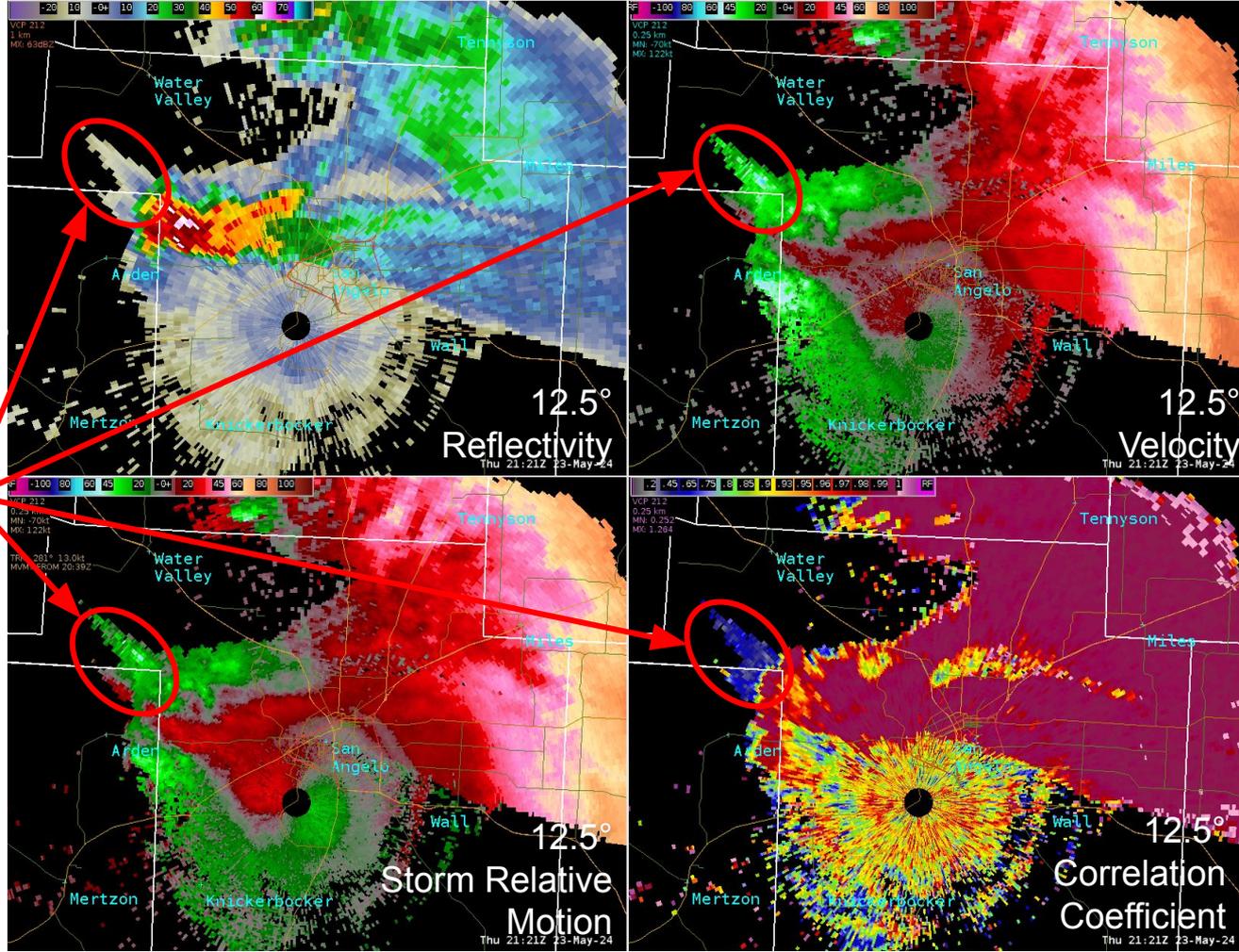
-  Tornado
-  Large Hail
-  Severe Winds
-  T-Storm Wind Damage



## Storm Reports

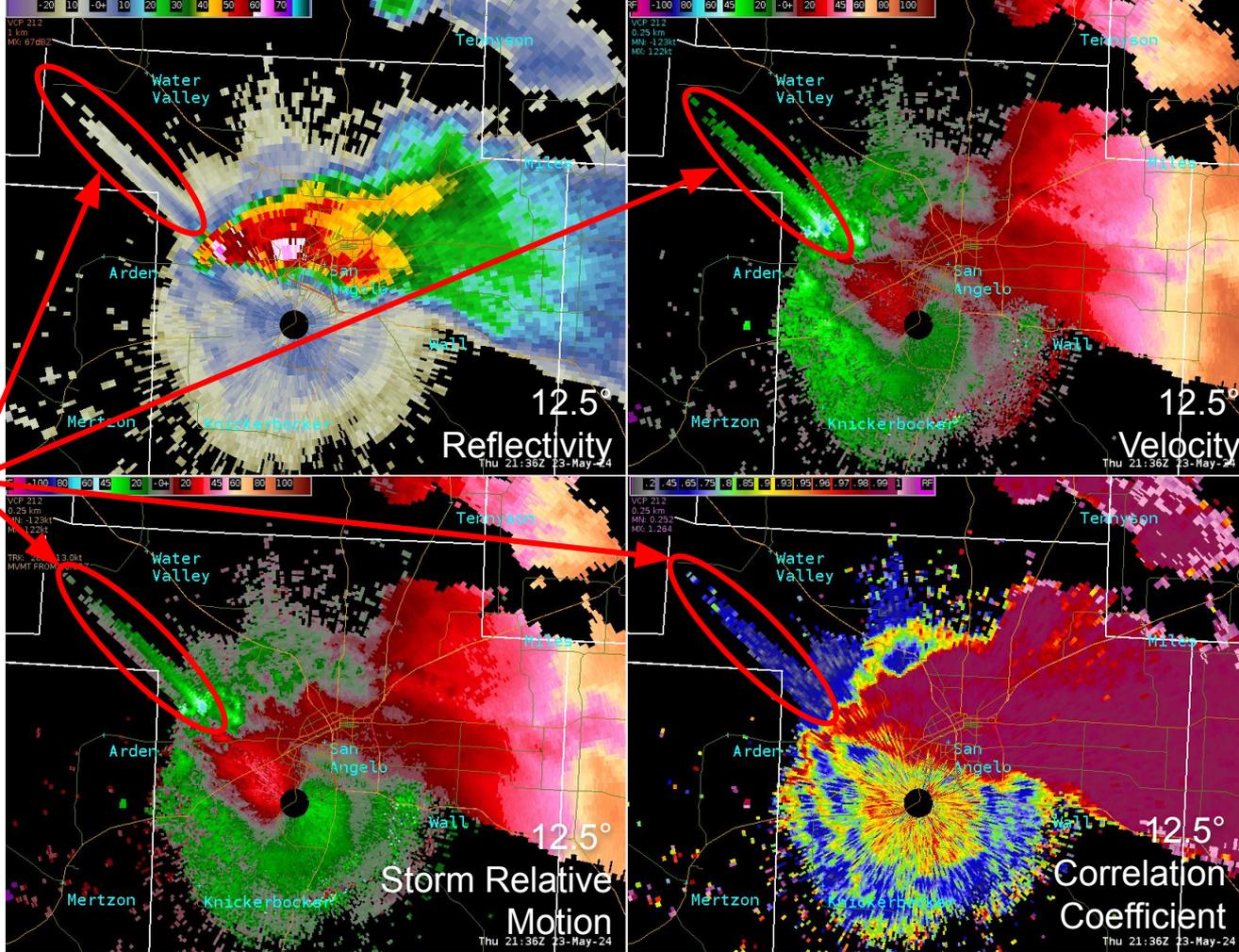
# San Angelo Hail Storm May 23, 2024 Radar Imagery from KSJT Radar 4:21 pm

First indications of a “hail spike” signature on radar. Indicates severe (1+ inch) hail.



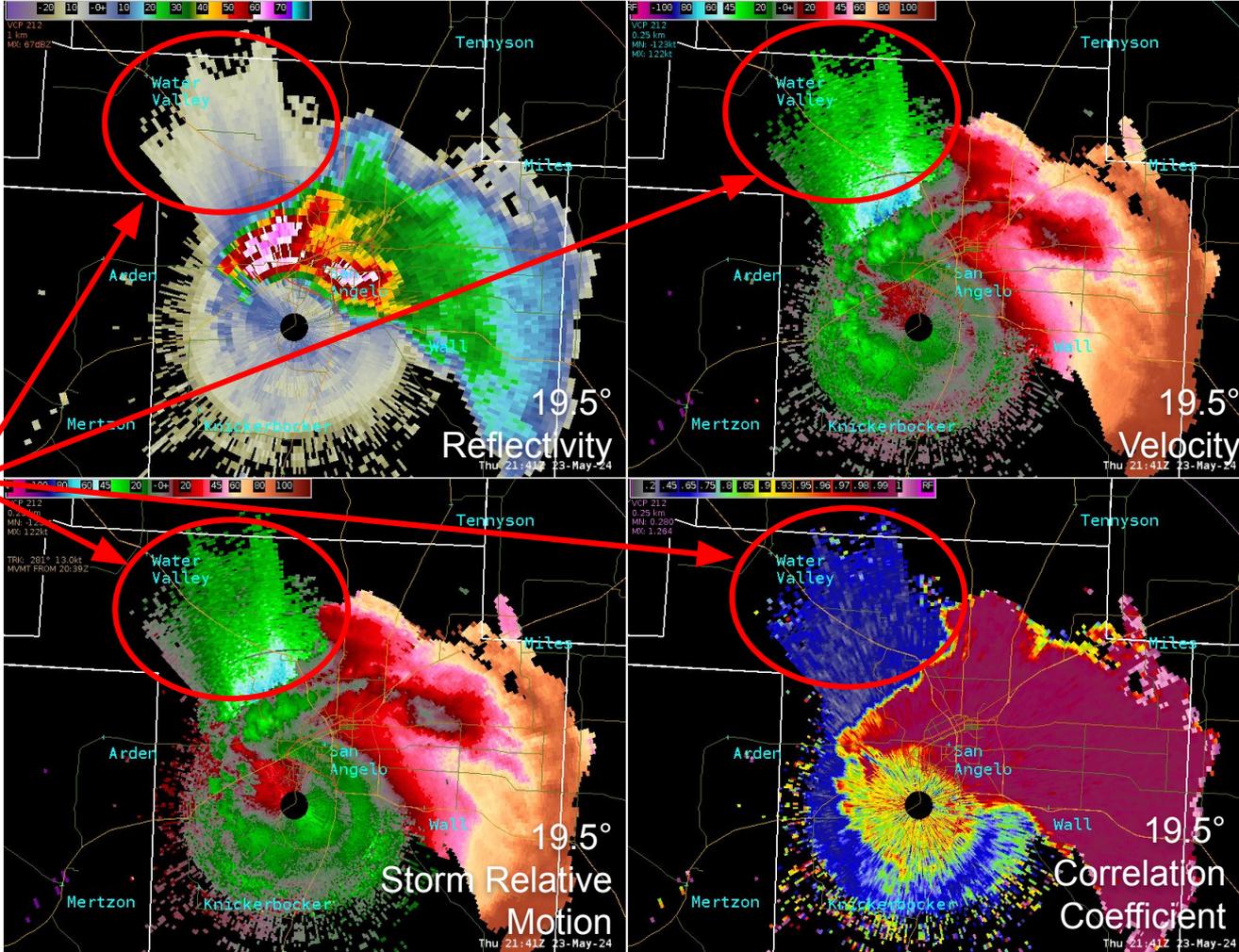
# San Angelo Hail Storm May 23, 2024 Radar Imagery from KSJT Radar 4:36 pm

“Hail spike” signature on radar becomes more pronounced. Indicates very large/giant hail stones.

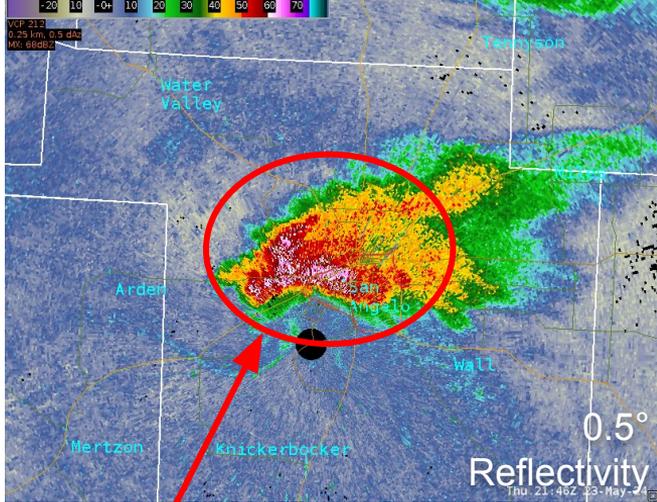


# San Angelo Hail Storm May 23, 2024 Radar Imagery from KSJT Radar 4:41 pm

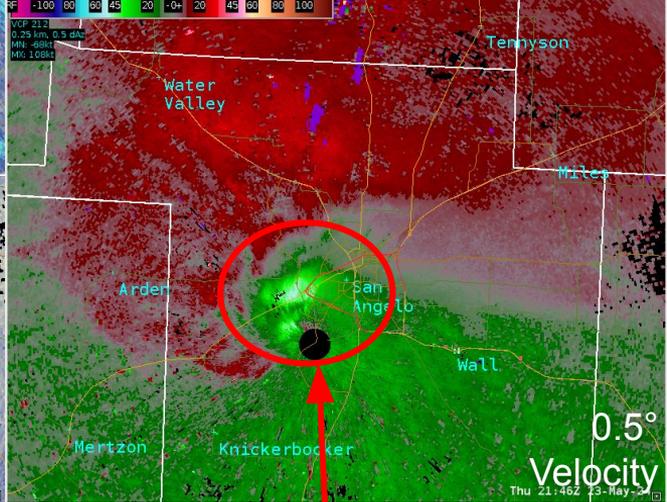
Massive “hail spike” signature on radar. Indicates very large/giant hail stones.



# San Angelo Hail Storm May 23, 2024 Radar Imagery from KSJT Radar 4:46 pm



Radar reflectivities  
60-65 dBZ indicate  
severe hail



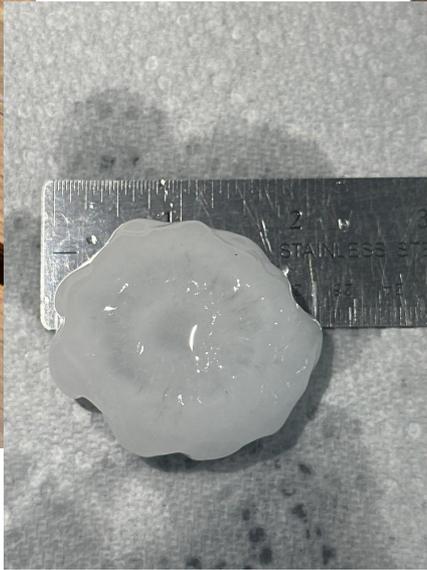
Strong velocities (at 50  
kt) indicating potential  
for damaging wind  
gusts of 60+ mph.



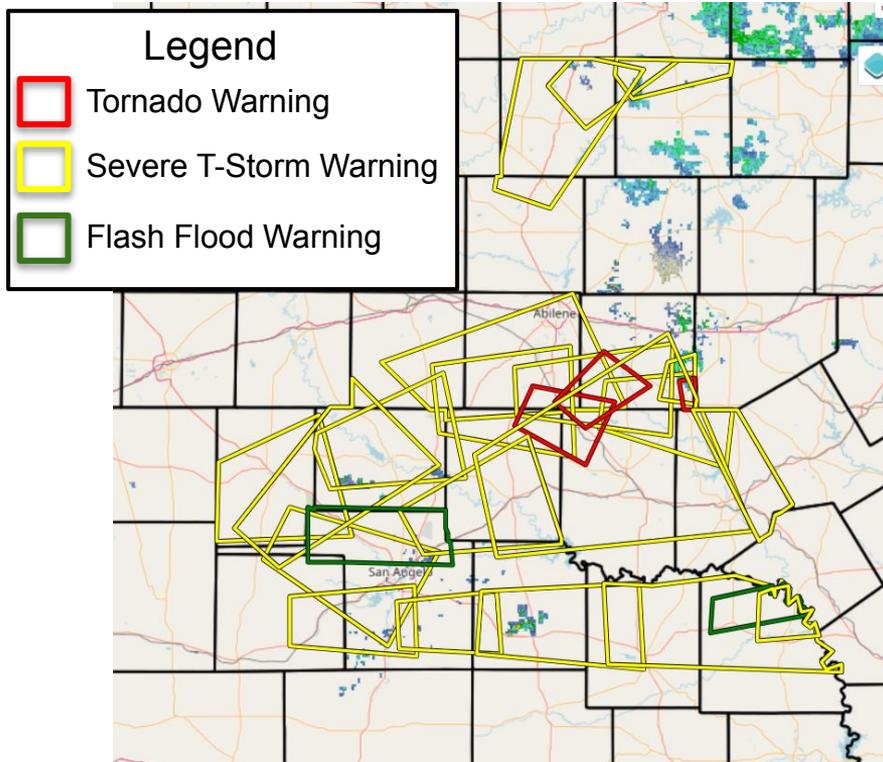
# Hail Photos/Damage - 5/23



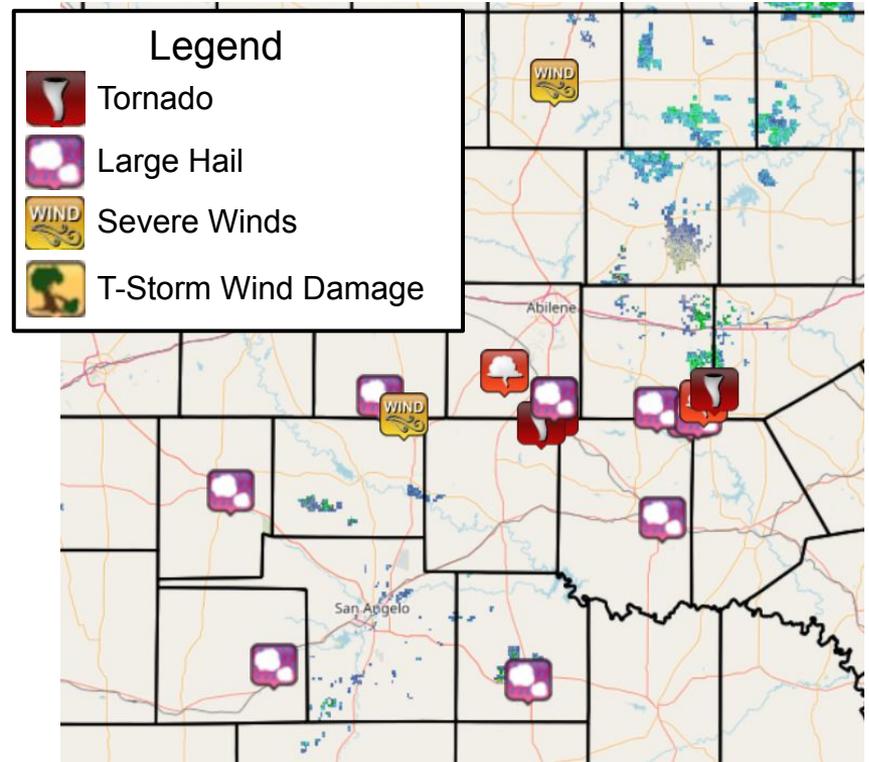
# Hail Photos/Damage - 5/23



# Warnings and Storm Reports - May 25



**Warnings Issued**



**Storm Reports**

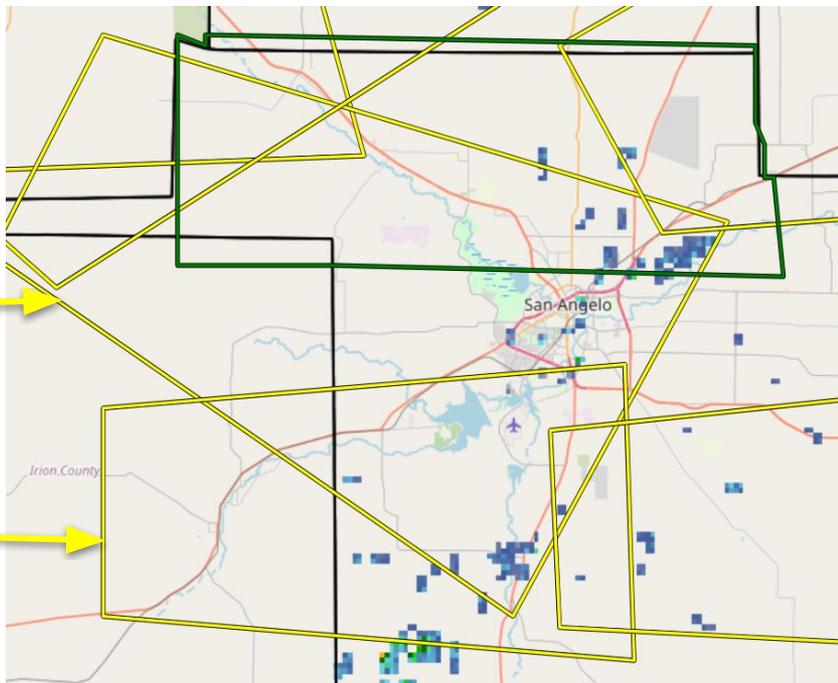
# Warnings - May 25 - San Angelo Area

## Severe T-Storm Warning

- Quarter size hail and 70 mph winds
- Issued at 1:29 am
- Effective through 2:15 am

## Severe T-Storm Warning

- Quarter size hail and 60 mph winds
- Issued at 3:18 am
- Effective through 4:00 am

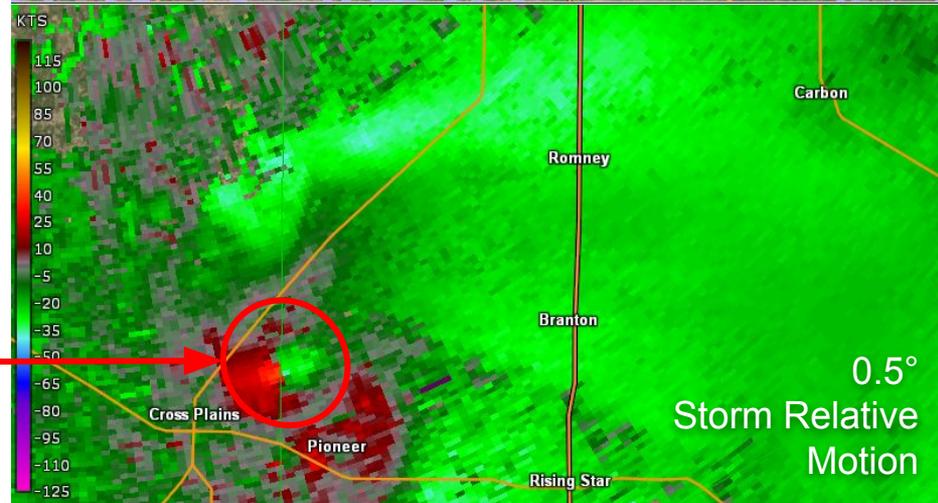
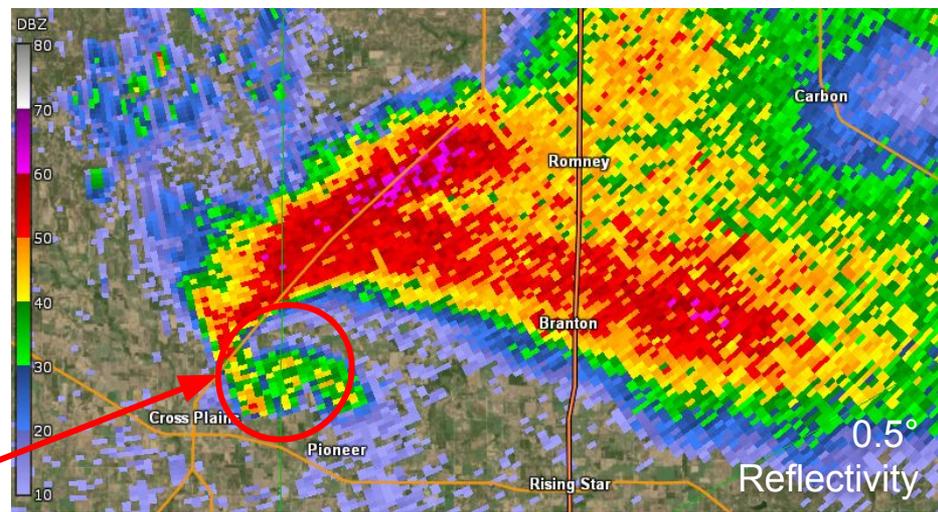


**Warnings Issued**

# Cross Plains Tornado May 25, 2024 Radar Imagery from KDYX Radar 5:39 pm

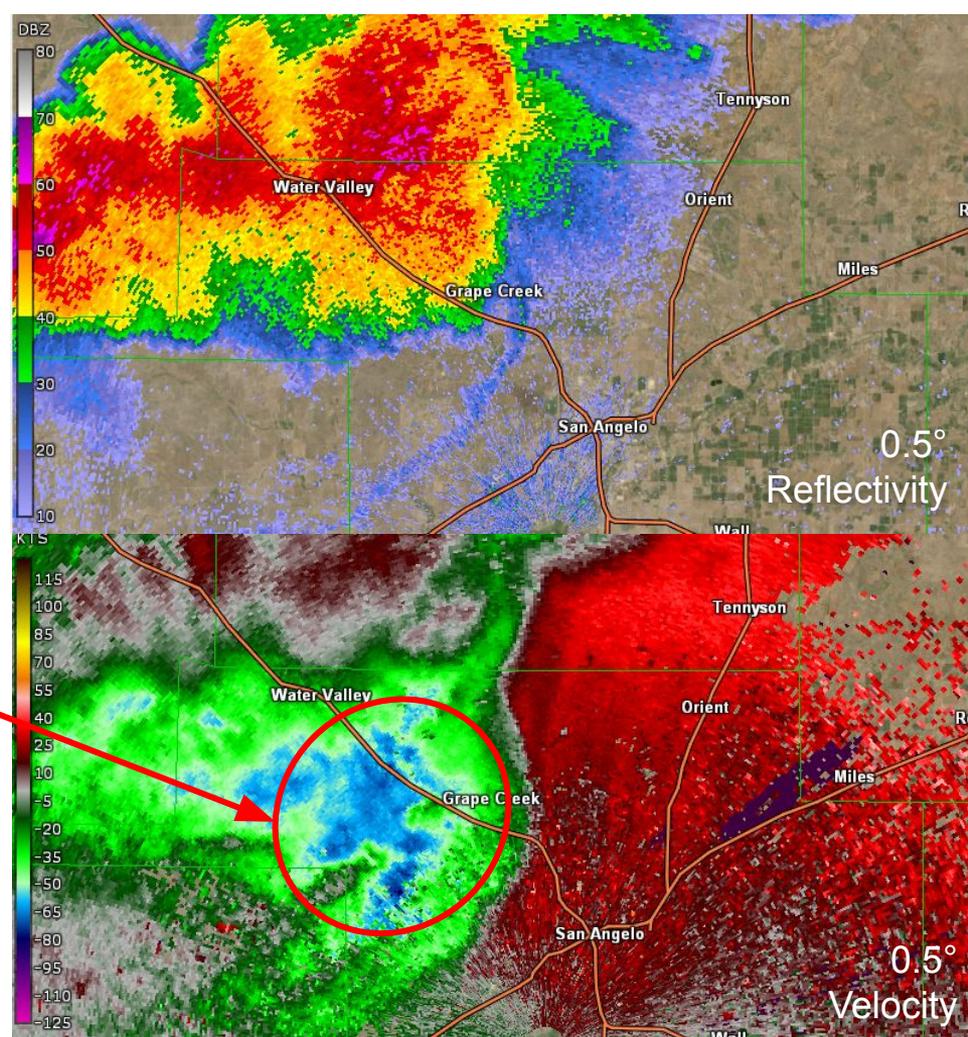
“Hook” Signature

Tight Rotation  
Couplet

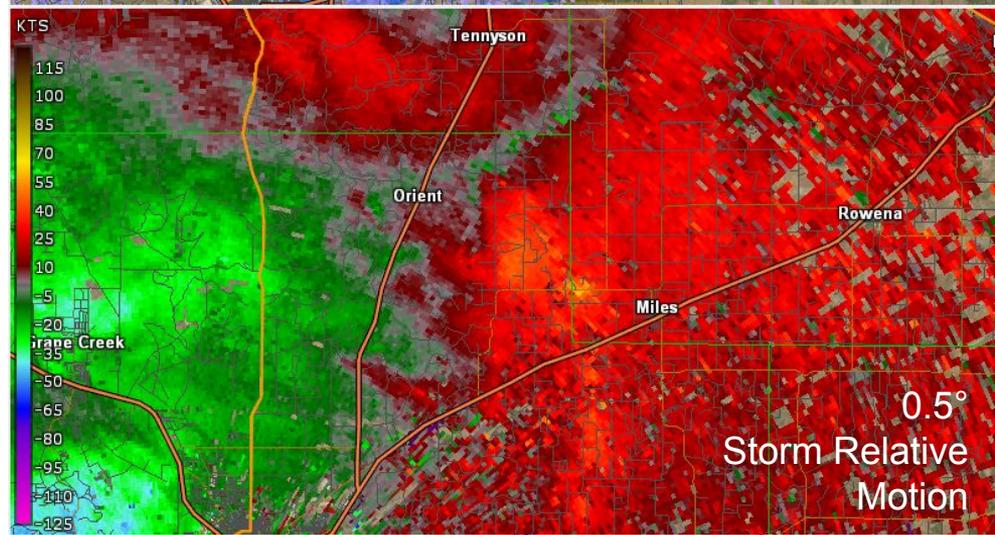
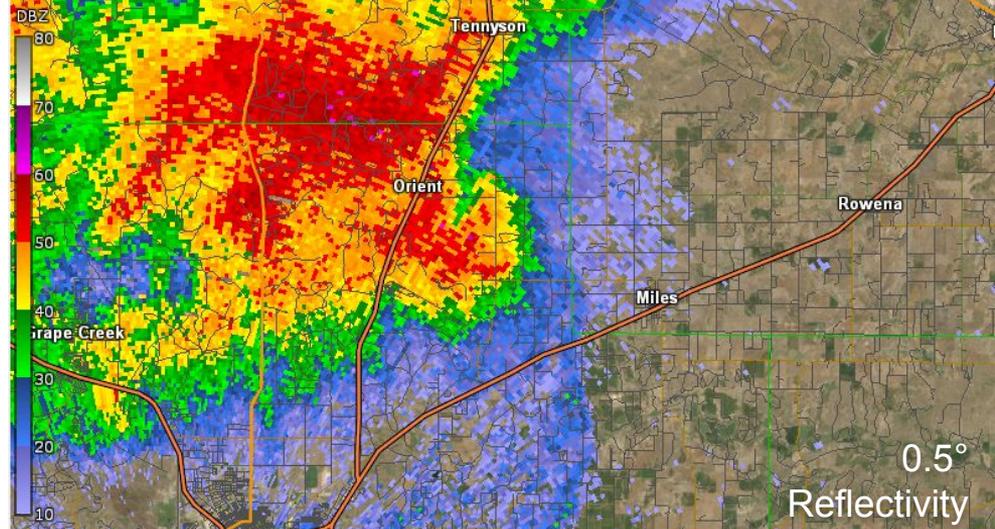


# Carlsbad/Grape Creek Damaging Winds May 26, 2024 Radar Imagery from KSJT Radar 1:48 am

Very strong velocities  
(~60-70 kt) indicated on  
radar



# Miles Damaging Winds May 26, 2024 Radar Imagery from KSJT Radar 2:07 am



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# Carlsbad/Grape Creek Wind Damage - 5/25



# Miles Wind Damage - 5/25

