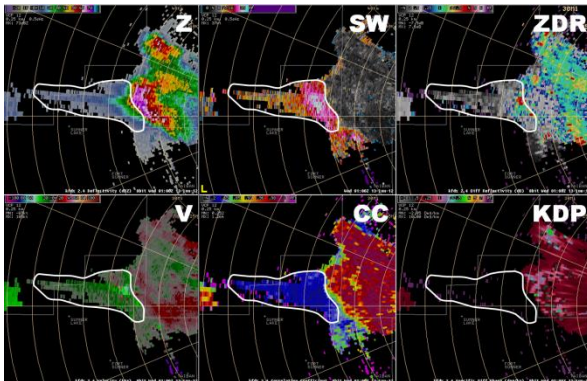


# Radar Estimated Hail Type/Size

Storm-Top Divergence		DUAL-POL RADAR HAIL SIGNATURES		
<b>Peak ΔV(kts)</b>	<b>Max Hail Size (in.)</b>	<b>Z:</b> 45-59 dBZ = Hail poss ≥60 dBZ = Hail likely	<b>ZDR:</b> -0.3 to 1 dB ≈ Dry or large hail > 1 dB ≈ More liquid	
70-102	Quarter (1")	<b>CC:</b> 0.93 - 0.97 ≈ 1-2" hail 0.70 - 0.90 ≈ ≥2" hail	<b>KDP:</b> <1°/km ≈ Mostly dry hail >3°/km ≈ Rain/hail combo or melting hail	
103-134	Ping Pong (1 ½")			
115-147	Golf ball (1 ¾")			
130-162	Hen Egg/Lime (2")			
159-192	Tennis Ball (2 ½")			
174-207	Baseball (2 ¾")			
233-267	Grapefruit (4")			
		<b>Hail Event Type</b>	<b>Signature</b>	
		<b>Severe Hail (with little rain)</b>	Z > 55 dBZ	ZDR < 1 dB
			CC ≈ 0.95-0.97	KDP < 1°/km
		<b>Severe Hail Mixed w/Rain</b>	Z > 55 dBZ	ZDR ≈ 1-2 dB
			CC ~0.93-0.96	KDP > 0.5°/km
		<b>Sub-Severe Dry Hail</b>	Z ≈ 45-55 dBZ	ZDR ≈ 0 dB
			CC > 0.98	KDP ≈ 0°/km
		<b>Sub-Severe Melting Hail</b>	Z > 55 dBZ	ZDR > 2 dB
			CC ≈ 0.92-0.96	KDP > 4-5°/km
		<b>Significant (≥2") Hail</b>	Z > 55 dBZ (>45 dBZ)	ZDR ≈ 0 dB or lower
			CC < 0.9 (possibly 0.7)	KDP not displayed

TBSS ≈ Sig (≥2") Hail\*



\*Valid for S-band radar only