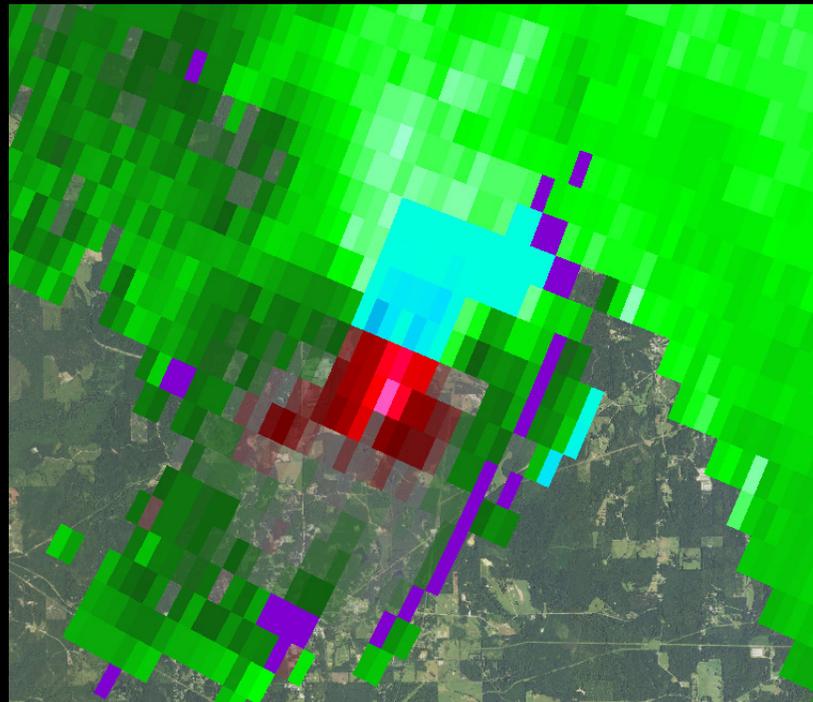
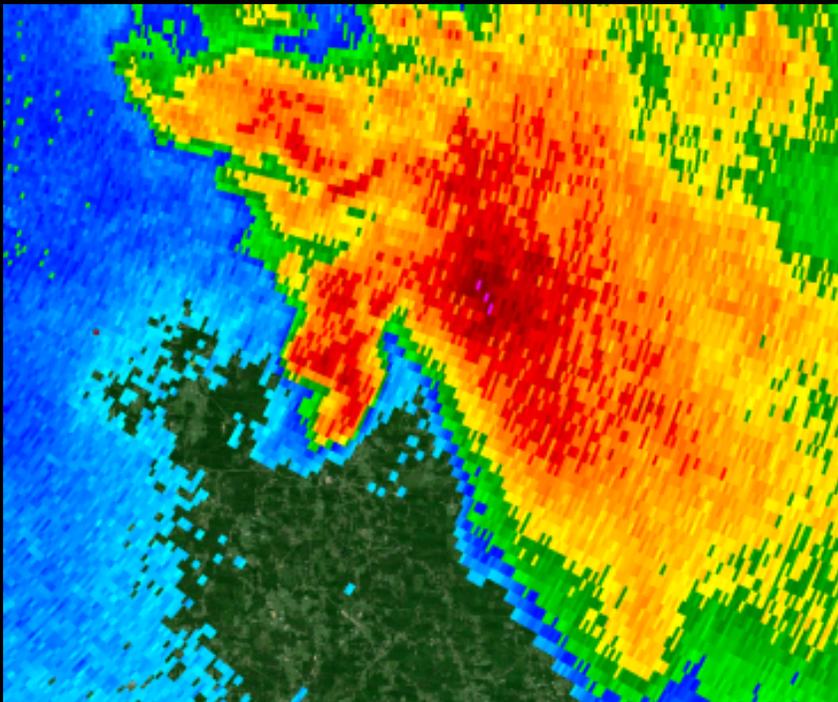
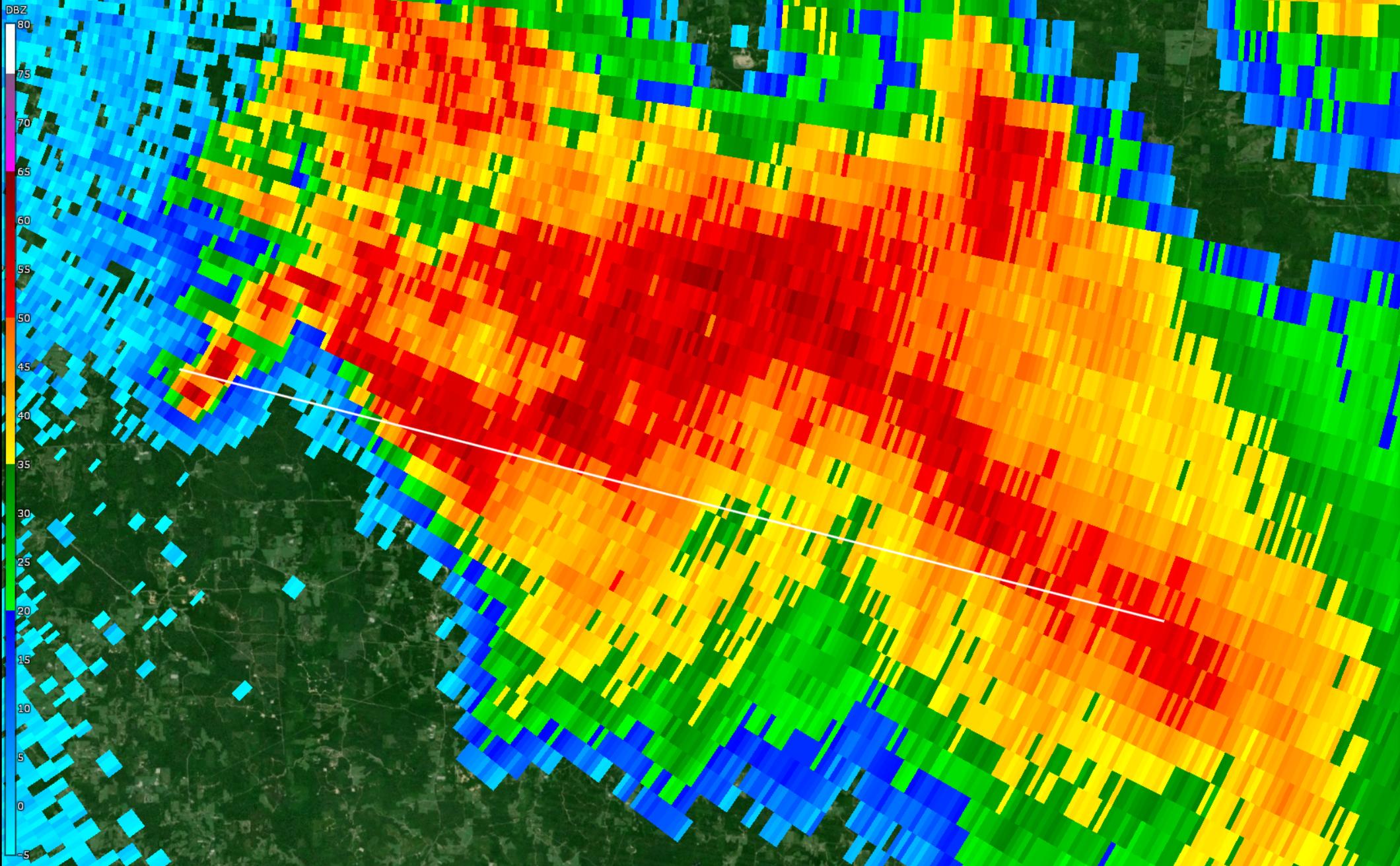


# DRC Analysis

June 18, 2023  
Bay Springs-Louin, MS  
EF3 Tornado





Site: KDGX - MRLE\_3  
 VST: 06/19/2023 03:49:20 Z  
 Prod: 06/19/2023 03:51:57 Z  
 VCP: 212 SMV: ----  
 Tilt: 1.845°

- Select Product:
- BR  VIL  ZDR
  - BV  VILD  CC
  - SW  PQSH  PHI
  - SRV  MEHS  KDP
  - ET  NROT  HCA

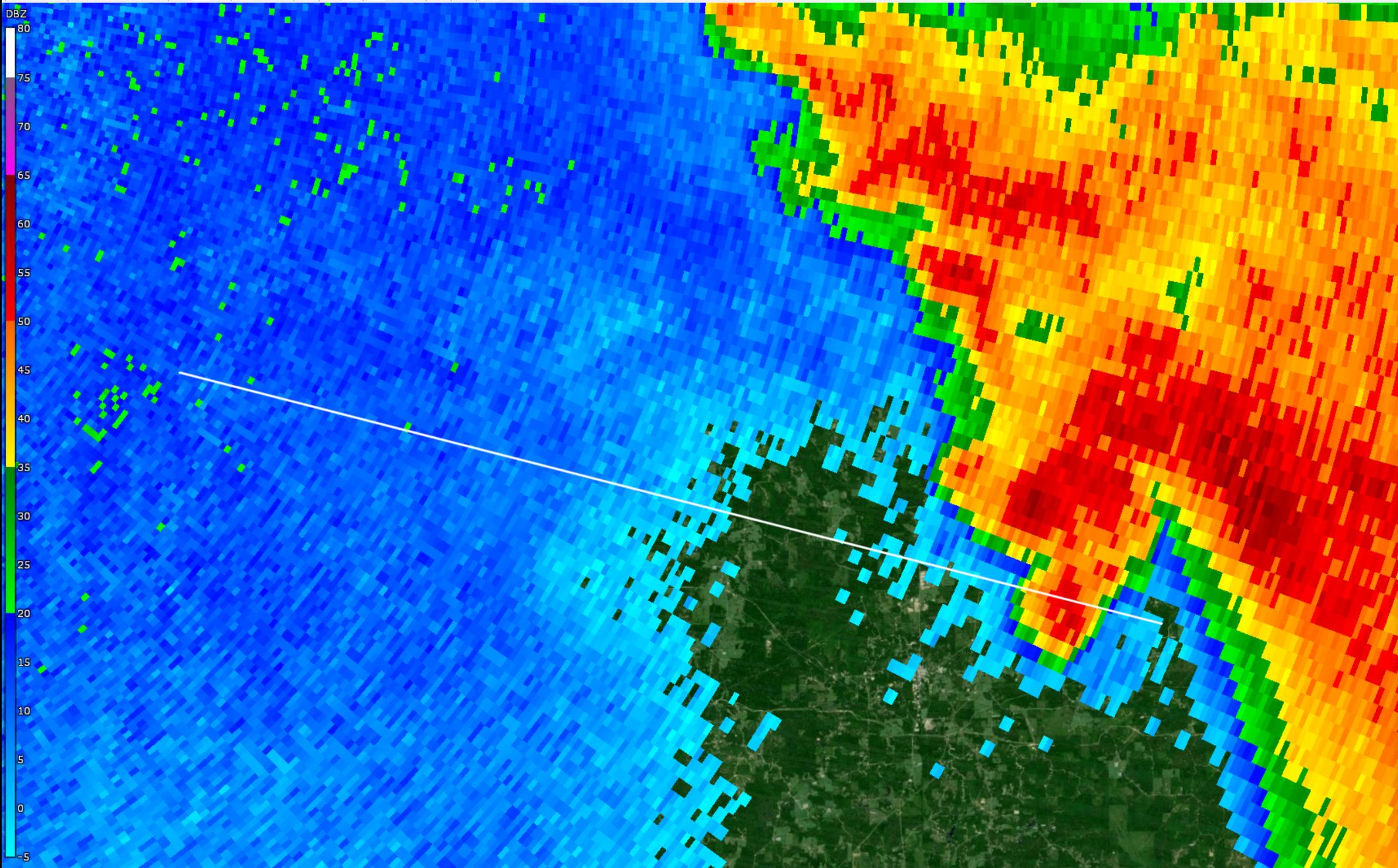
- Select Tilt:
- |       |       |       |       |
|-------|-------|-------|-------|
| 0.3°  | 0.5°  | 0.9°  | 1.4°  |
| 1.8°  | 2.5°  | 3.2°  | 4.0°  |
| 5.1°  | 6.5°  | 8.0°  | 10.0° |
| 12.4° | 15.6° | 19.5° |       |

Product Details:

Max: 64.5 dbz  
 Az: 24.6°  
 Ran: 69.1 nm

Active Warnings - GR2Analyst

Type	State	C...	Expires



Site: KDGX - MRLE\_3  
VST: 06/19/2023 04:40:18 Z  
Prod: 06/19/2023 04:40:18 Z  
VCP: 212 SMV: ----  
Tilt: 0.353°

- Select Product:
- BR  VIL  ZDR
  - BV  VILQ  CC
  - SW  PQSH  PHI
  - SRV  MEHS  KDP
  - ET  NROT  HCA

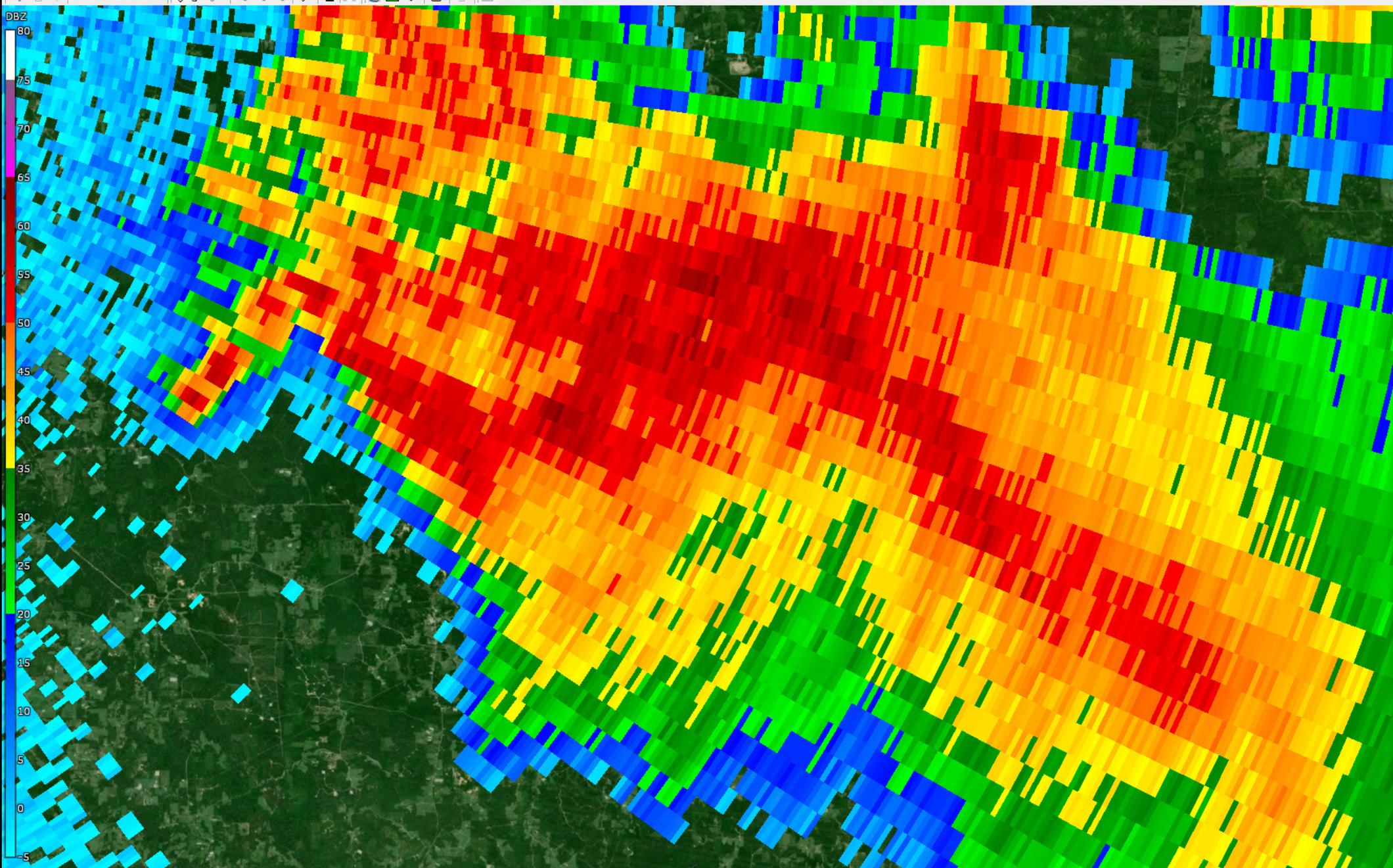
- Select Tilt:
- |       |       |       |       |
|-------|-------|-------|-------|
| 0.4°  | 0.5°  | 0.9°  | 1.4°  |
| 1.8°  | 2.5°  | 3.2°  | 4.0°  |
| 5.1°  | 6.5°  | 8.0°  | 10.0° |
| 12.4° | 15.6° | 19.5° |       |

Product Details:

Max: 65.5 dbz  
Az: 51.7°  
Ran: 28.3 nm

Active Warnings - GR2Analyst

Type	State	C...	Expires



Site: KDGX - MRLE\_3  
VST: 06/19/2023 03:49:20 Z  
Prod: 06/19/2023 03:51:57 Z  
VCP: 212 SMV: ----  
Tilt: 1.845°

- Select Product:
- BR
  - VIL
  - ZDR
  - BV
  - VILD
  - CC
  - SW
  - PQSH
  - PHI
  - SRV
  - MEHS
  - KDP
  - ET
  - NROT
  - HCA

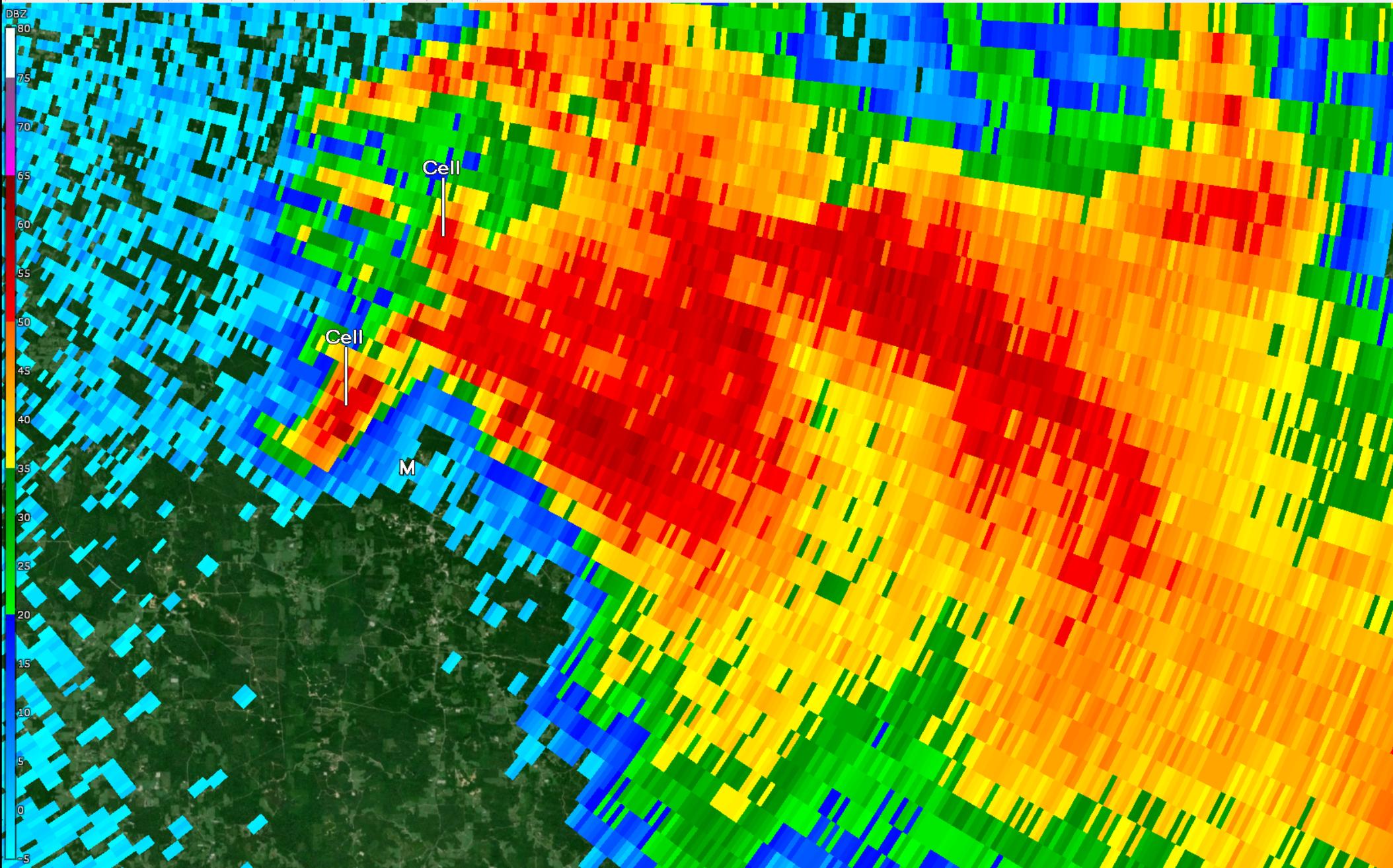
- Select Tilt:
- |       |       |       |       |
|-------|-------|-------|-------|
| 0.3°  | 0.5°  | 0.9°  | 1.4°  |
| 1.8°  | 2.5°  | 3.2°  | 4.0°  |
| 5.1°  | 6.5°  | 8.0°  | 10.0° |
| 12.4° | 15.6° | 19.5° |       |

Product Details:

Max: 64.5 dbz  
Az: 24.6°  
Ran: 69.1 nm

Active Warnings - GR2Analyst

Type	State	C...	Expires
------	-------	------	---------



Site: KDGX - MRLE\_3  
VST: 06/19/2023 03:56:32 Z  
Prod: 06/19/2023 03:59:09 Z  
VCP: 212 SMV: ----  
Tilt: 1.844°

- Select Product:
- BR  VIL  ZDR
  - BV  VILQ  CC
  - SW  PQSH  PHI
  - SRV  MEHS  KDP
  - ET  NROT  HCA

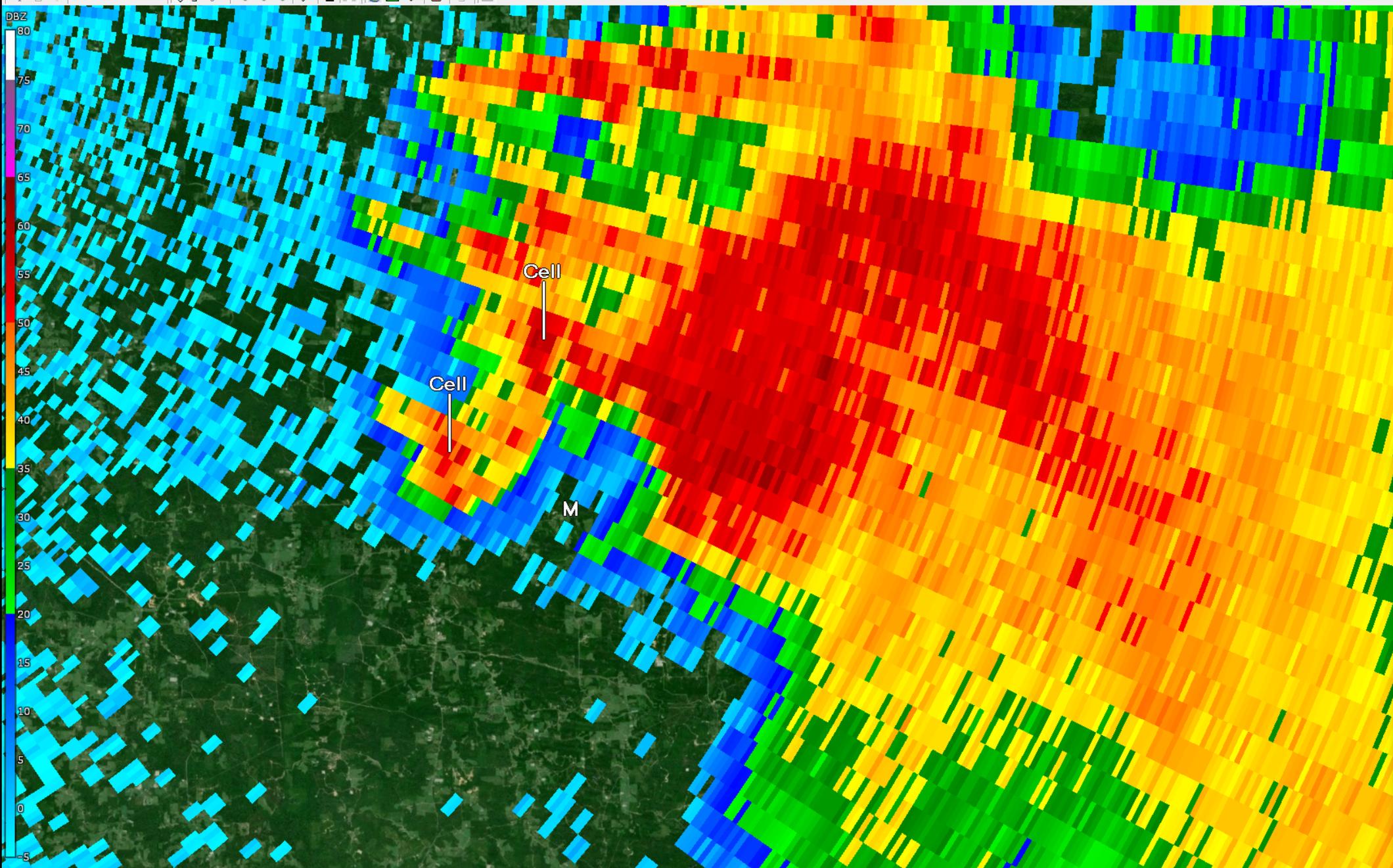
- Select Tilt:
- |       |       |       |       |
|-------|-------|-------|-------|
| 0.4°  | 0.5°  | 0.9°  | 1.4°  |
| 1.8°  | 2.5°  | 3.2°  | 4.0°  |
| 5.1°  | 6.5°  | 8.0°  | 10.0° |
| 12.4° | 15.6° | 19.5° |       |

Product Details:

Max: 63.5 dbz  
Az: 51.6°  
Ran: 32.6 nm

Active Warnings - GR2Analyst

Type	State	C...	Expires



Site: KDGX - MRLE\_3  
VST: 06/19/2023 04:03:43 Z  
Prod: 06/19/2023 04:06:30 Z  
VCP: 212 SMV: ----  
Tilt: 1.844°

- Select Product:
- BR  VIL  ZDR
  - BV  VILD  CC
  - SW  PQSH  PHI
  - SRV  MEHS  KDP
  - ET  NROT  HCA

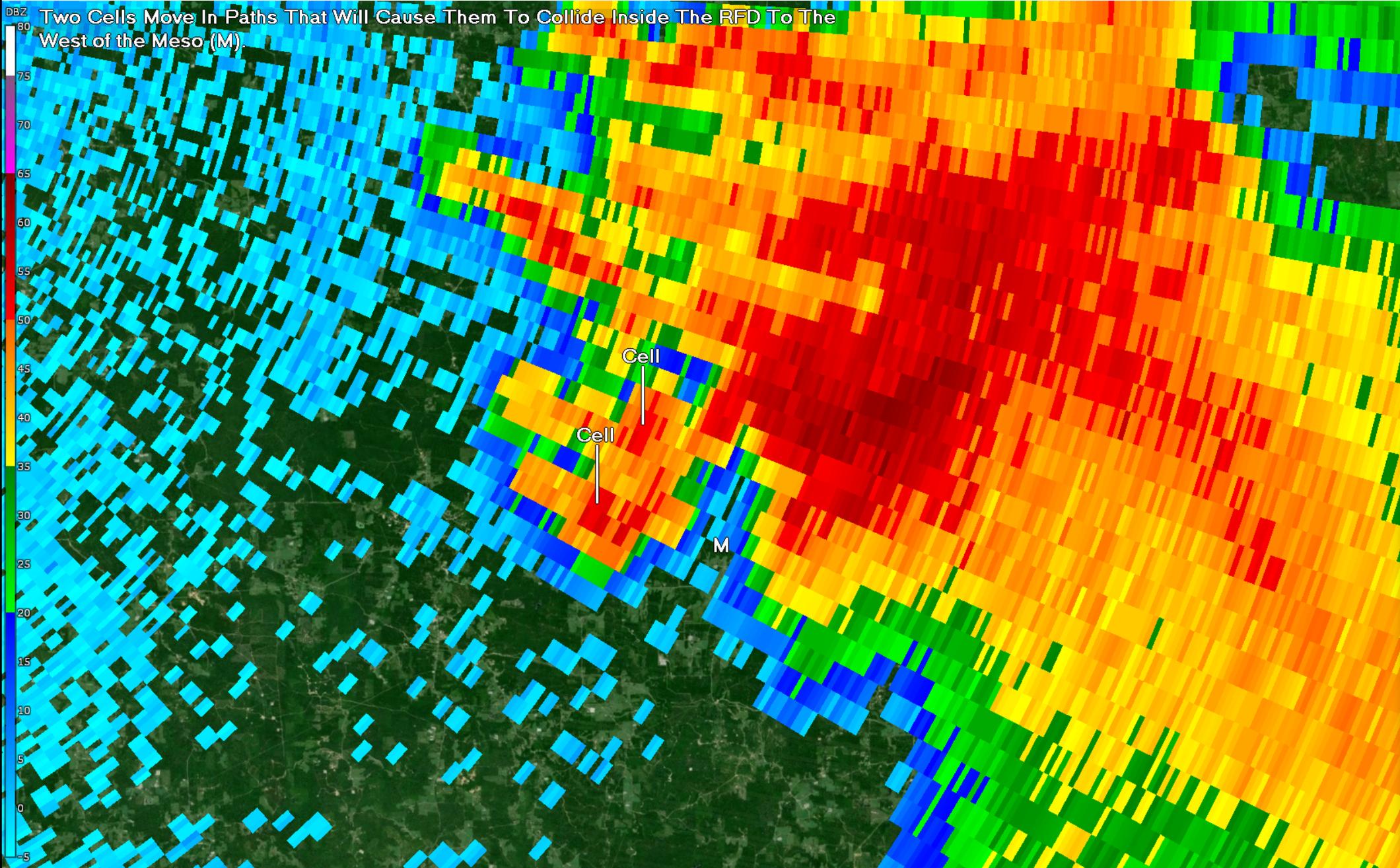
- Select Tilt:
- |       |       |       |       |
|-------|-------|-------|-------|
| 0.4°  | 0.5°  | 0.9°  | 1.4°  |
| 1.8°  | 2.5°  | 3.2°  | 4.0°  |
| 5.1°  | 6.5°  | 8.0°  | 10.0° |
| 12.4° | 15.6° | 19.5° |       |

Product Details:

Max: 63.5 dbz  
Az: 56.6°  
Ran: 35.1 nm

Active Warnings - GR2Analyst

Type	State	C...	Expires
------	-------	------	---------



Site: KDGX - MRLE\_3  
VST: 06/19/2023 04:11:11 Z  
Prod: 06/19/2023 04:13:42 Z  
VCP: 212 SMV: ----  
Tilt: 1.844°

- Select Product:
- BR
  - VIL
  - ZDR
  - BV
  - VILD
  - CC
  - SW
  - PQSH
  - PHI
  - SRV
  - MEHS
  - KDP
  - ET
  - NROT
  - HCA

- Select Tilt:
- |       |       |       |       |
|-------|-------|-------|-------|
| 0.4°  | 0.5°  | 0.9°  | 1.4°  |
| 1.8°  | 2.5°  | 3.2°  | 4.0°  |
| 5.1°  | 6.5°  | 8.0°  | 10.0° |
| 12.4° | 15.6° | 19.5° |       |

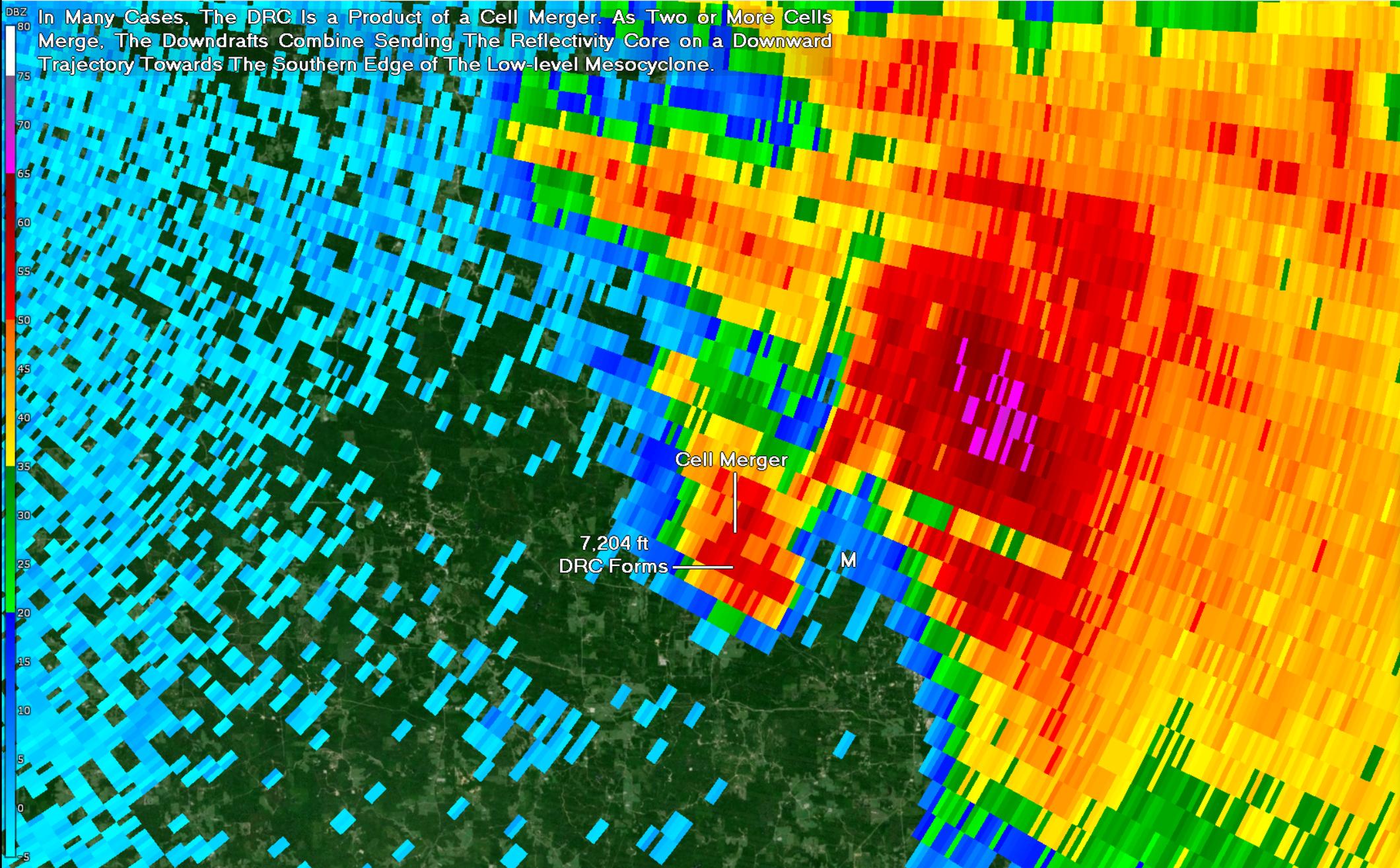
Product Details:

Max: 66.5 dbz  
Az: 39.6°  
Ran: 30.4 nm

Active Warnings - GR2Analyst

Type	State	C...	Expires
------	-------	------	---------

In Many Cases, The DRC Is a Product of a Cell Merger. As Two or More Cells Merge, The Downdrafts Combine Sending The Reflectivity Core on a Downward Trajectory Towards The Southern Edge of The Low-level Mesocyclone.



Site: KDGX - MRLE\_3  
VST: 06/19/2023 04:18:11 Z  
Prod: 06/19/2023 04:20:58 Z  
VCP: 212 SMV: ----  
Tilt: 1.844°

- Select Product:
- BR  VIL  ZDR
  - BV  VILQ  CC
  - SW  PQSH  PHI
  - SRV  MEHS  KDP
  - ET  NROT  HCA

- Select Tilt:
- - 
  - 
  -

Product Details:

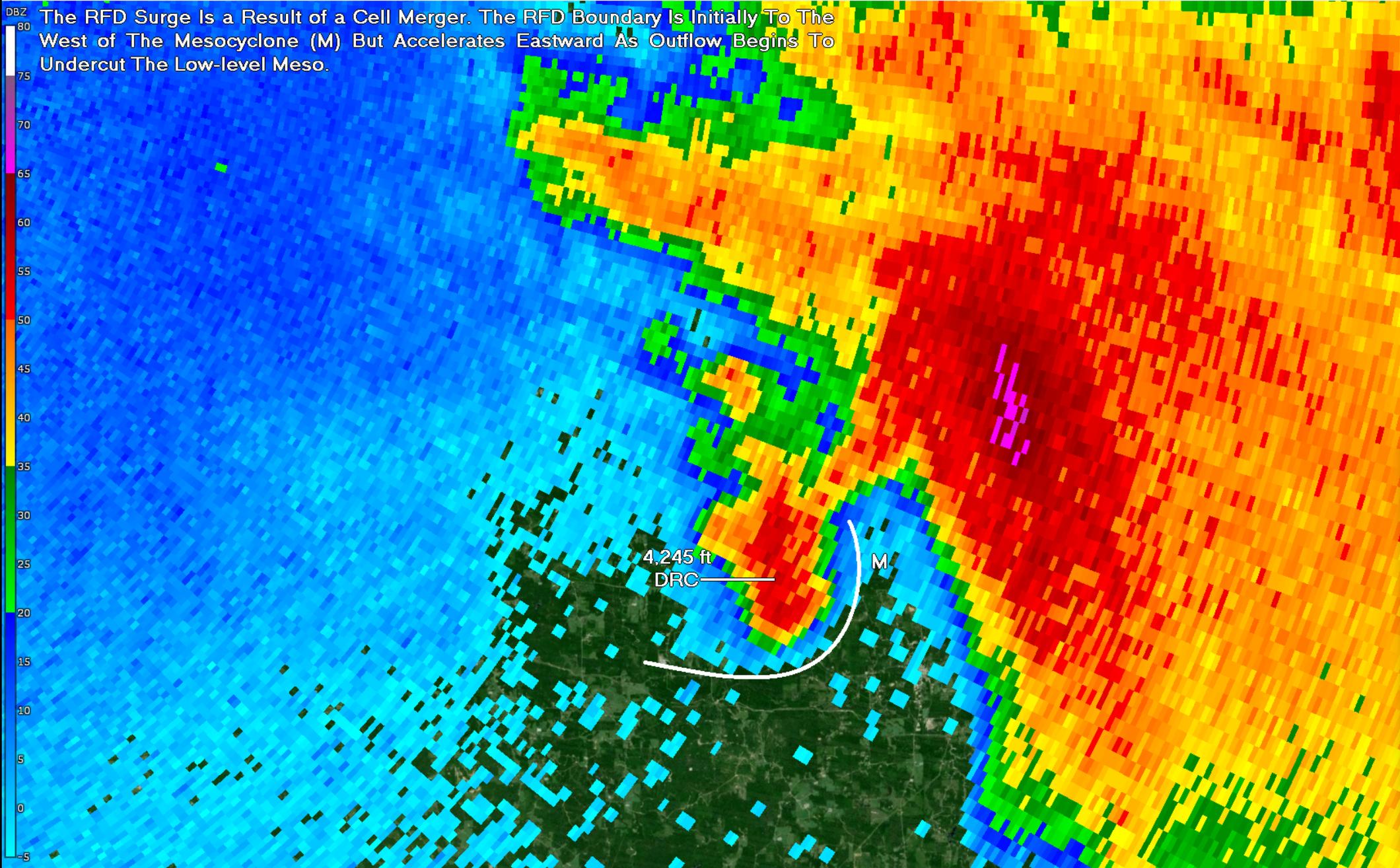
Max: 68.5 dbz  
Az: 107.6°  
Ran: 38.2 nm

Active Warnings - GR2Analyst

Type	State	C...	Expires



The RFD Surge is a Result of a Cell Merger. The RFD Boundary Is Initially To The West of The Mesocyclone (M) But Accelerates Eastward As Outflow Begins To Undercut The Low-level Meso.



Site: KDGX - MRLE\_3  
VST: 06/19/2023 04:18:11 Z  
Prod: 06/19/2023 04:23:16 Z  
VCP: 212 SMV: ----  
Tilt: 0.922°

- Select Product:
- BR  VIL  ZDR
  - BV  VILQ  CC
  - SW  PQSH  PHI
  - SRV  MEHS  KDP
  - ET  NROT  HCA

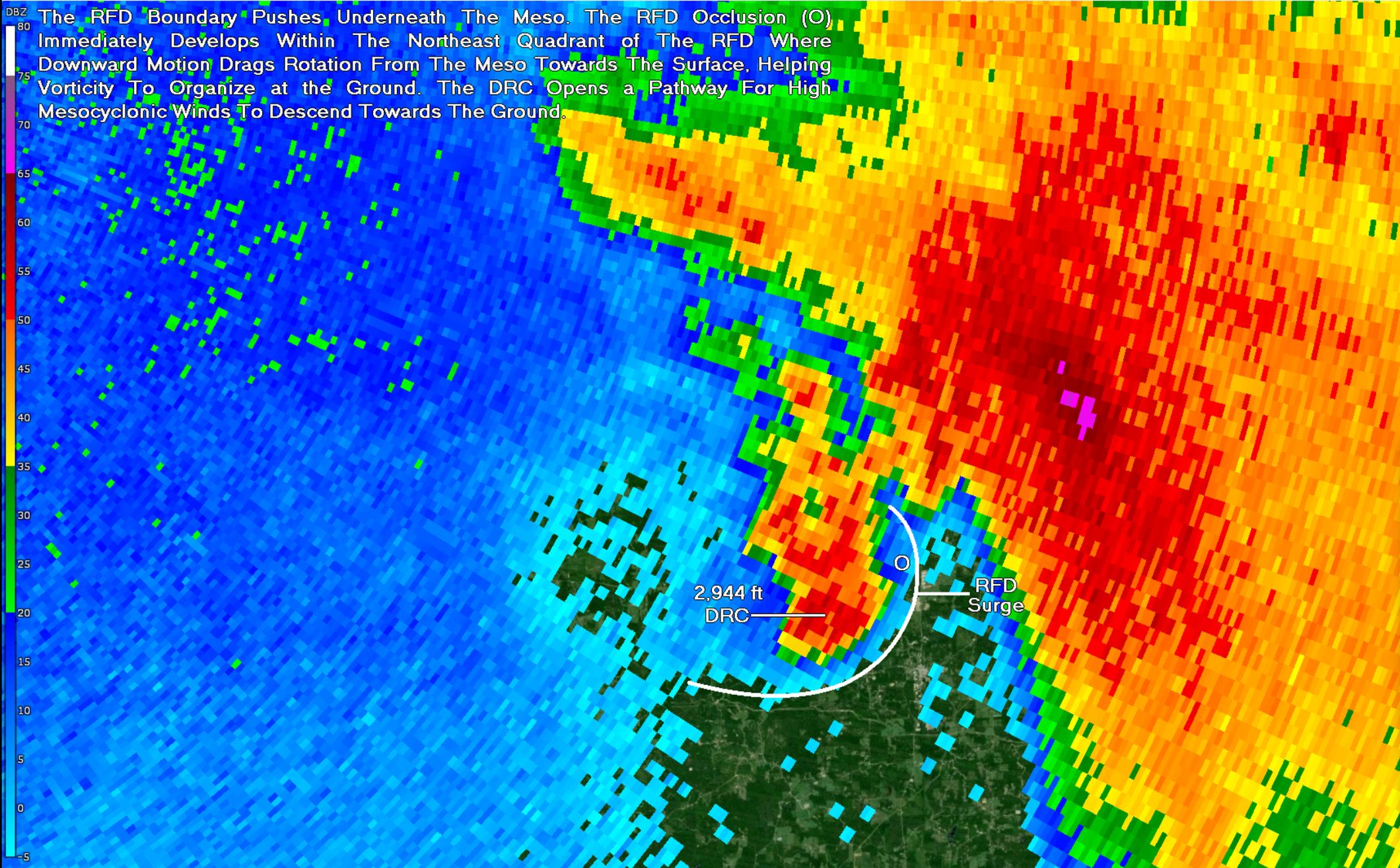
- Select Tilt:
- - 
  - 
  -

Product Details:

Max: 68.5 dbz  
Az: 107.2°  
Ran: 38.6 nm

Active Warnings - GR2Analyst

Type	State	C...	Expires



The RFD Boundary Pushes Underneath The Meso. The RFD Occlusion (O) Immediately Develops Within The Northeast Quadrant of The RFD Where Downward Motion Drags Rotation From The Meso Towards The Surface, Helping Vorticity To Organize at the Ground. The DRC Opens a Pathway For High Mesocyclonic Winds To Descend Towards The Ground.

Site: KDGX - MRLE\_3  
VST: 06/19/2023 04:25:39 Z  
Prod: 06/19/2023 04:26:18 Z  
VCP: 212 SMV: ----  
Tilt: 0.526°

- Select Product:
- BR  VIL  ZDR
  - BV  VILQ  CC
  - SW  PQSH  PHI
  - SRV  MEHS  KDP
  - ET  NROT  HCA

- Select Tilt:
- - 
  - 
  -

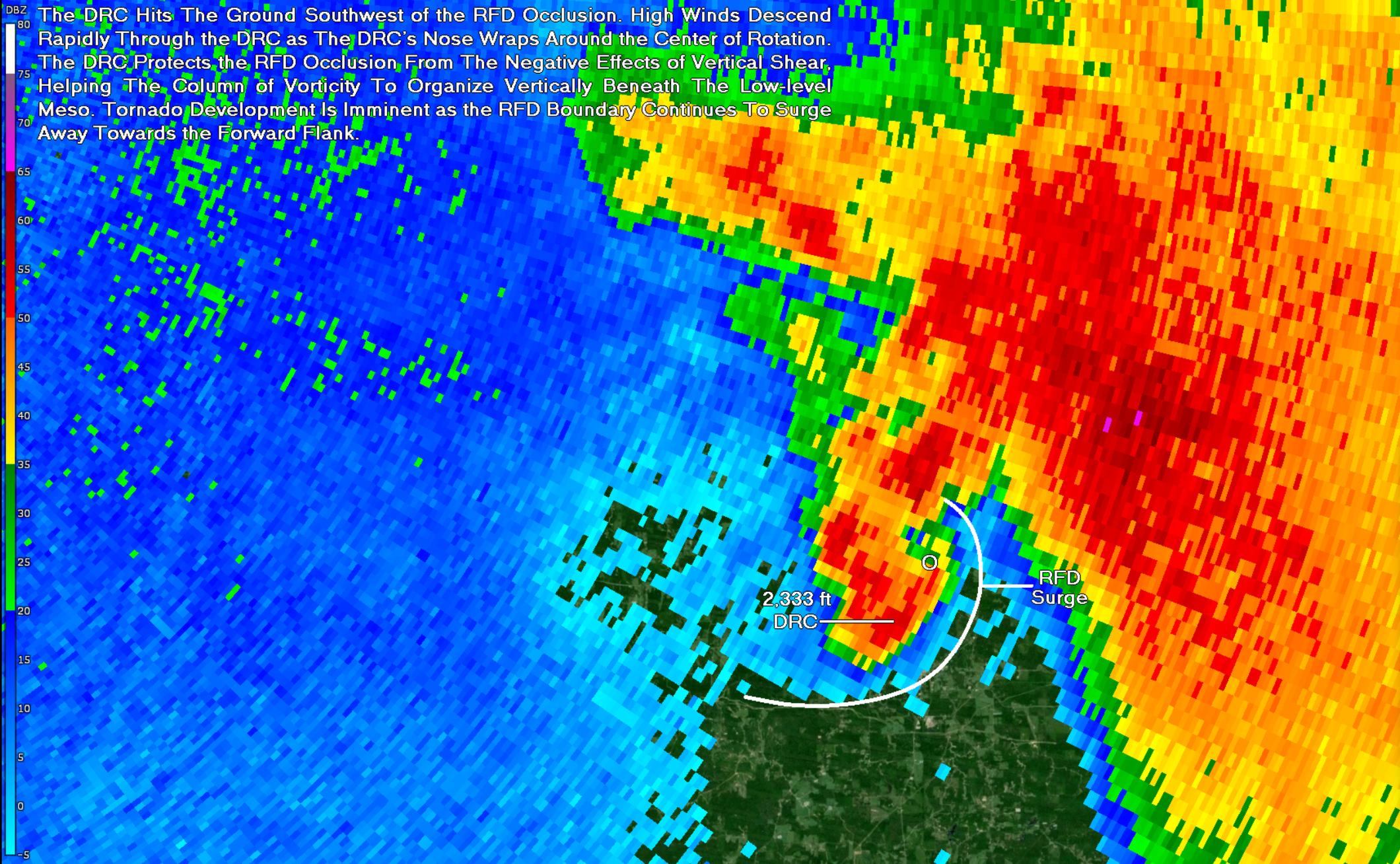
Product Details:

Max: 68.5 dbz  
Az: 106.2°  
Ran: 39.6 nm

Active Warnings - GR2Analyst

Type	State	C...	Expires

The DRC Hits The Ground Southwest of the RFD Occlusion. High Winds Descend Rapidly Through the DRC as The DRC's Nose Wraps Around the Center of Rotation. The DRC Protects the RFD Occlusion From The Negative Effects of Vertical Shear, Helping The Column of Vorticity To Organize Vertically Beneath The Low-level Meso. Tornado Development Is Imminent as the RFD Boundary Continues To Surge Away Towards the Forward Flank.



Site: KDGX - MRLE\_3  
VST: 06/19/2023 04:25:39 Z  
Prod: 06/19/2023 04:29:10 Z  
VCP: 212 SMV: ----  
Tilt: 0.348°

- Select Product:
- BR  VIL  ZDR
  - BV  VILQ  CC
  - SW  PQSH  PHI
  - SRV  MEHS  KDP
  - ET  NROT  HCA

- Select Tilt:
- |       |       |       |       |
|-------|-------|-------|-------|
| 0.3°  | 0.5°  | 0.9°  | 1.4°  |
| 1.8°  | 2.5°  | 3.2°  | 4.0°  |
| 5.1°  | 6.5°  | 8.0°  | 10.0° |
| 12.4° | 15.6° | 19.5° |       |

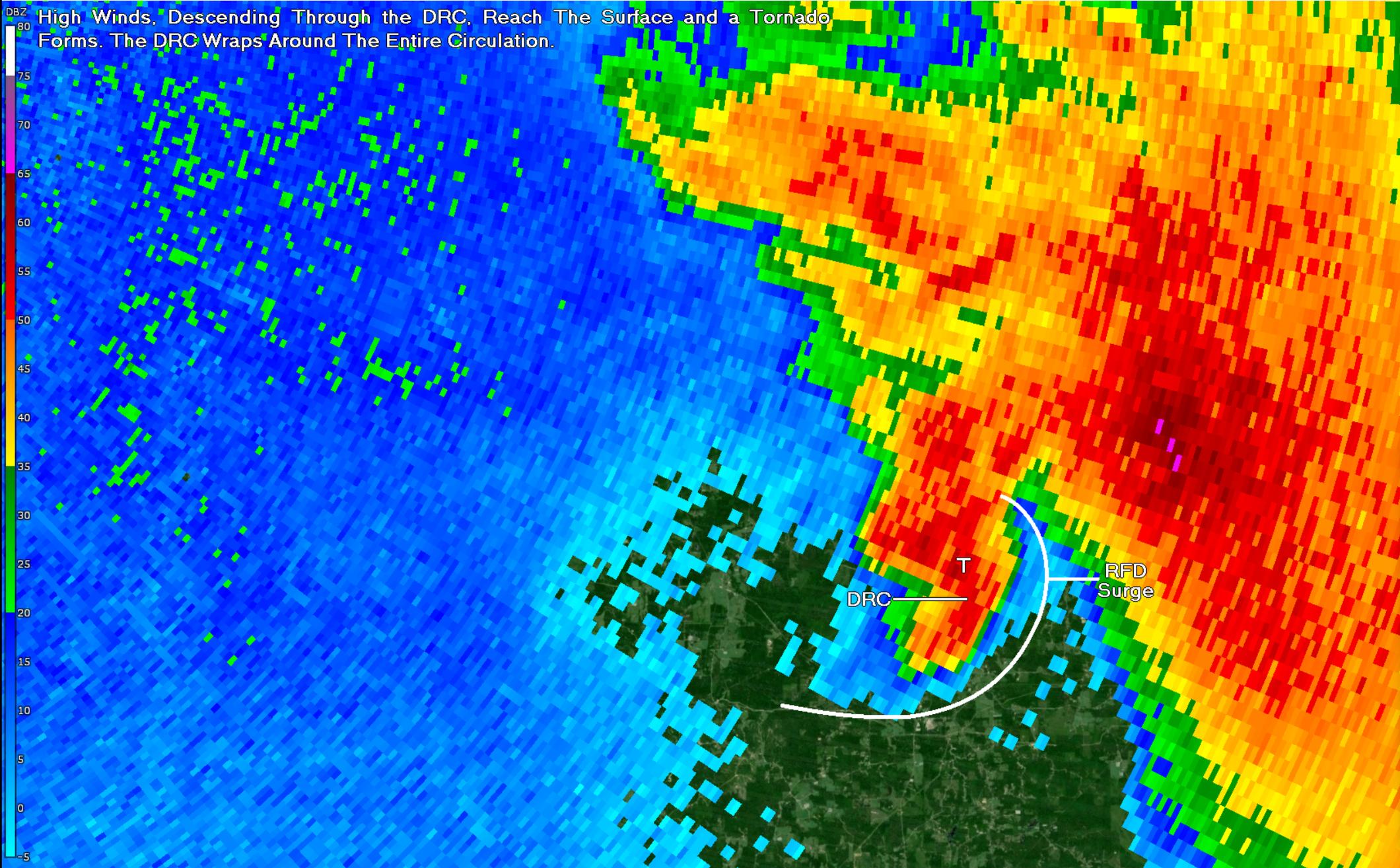
Product Details:

Max: 67.0 dbz  
Az: 106.8°  
Ran: 40.7 nm

Active Warnings - GR2Analyst

Type	State	C...	Expires

High Winds, Descending Through the DRC, Reach The Surface and a Tornado Forms. The DRC Wraps Around The Entire Circulation.



Site: KDGX - MRLE\_3  
VST: 06/19/2023 04:32:50 Z  
Prod: 06/19/2023 04:32:50 Z  
VCP: 212 SMV: ----  
Tilt: 0.353°

- Select Product:
- BR  VIL  ZDR
  - BV  VILD  CC
  - SW  PQSH  PHI
  - SRV  MEHS  KDP
  - ET  NROT  HCA

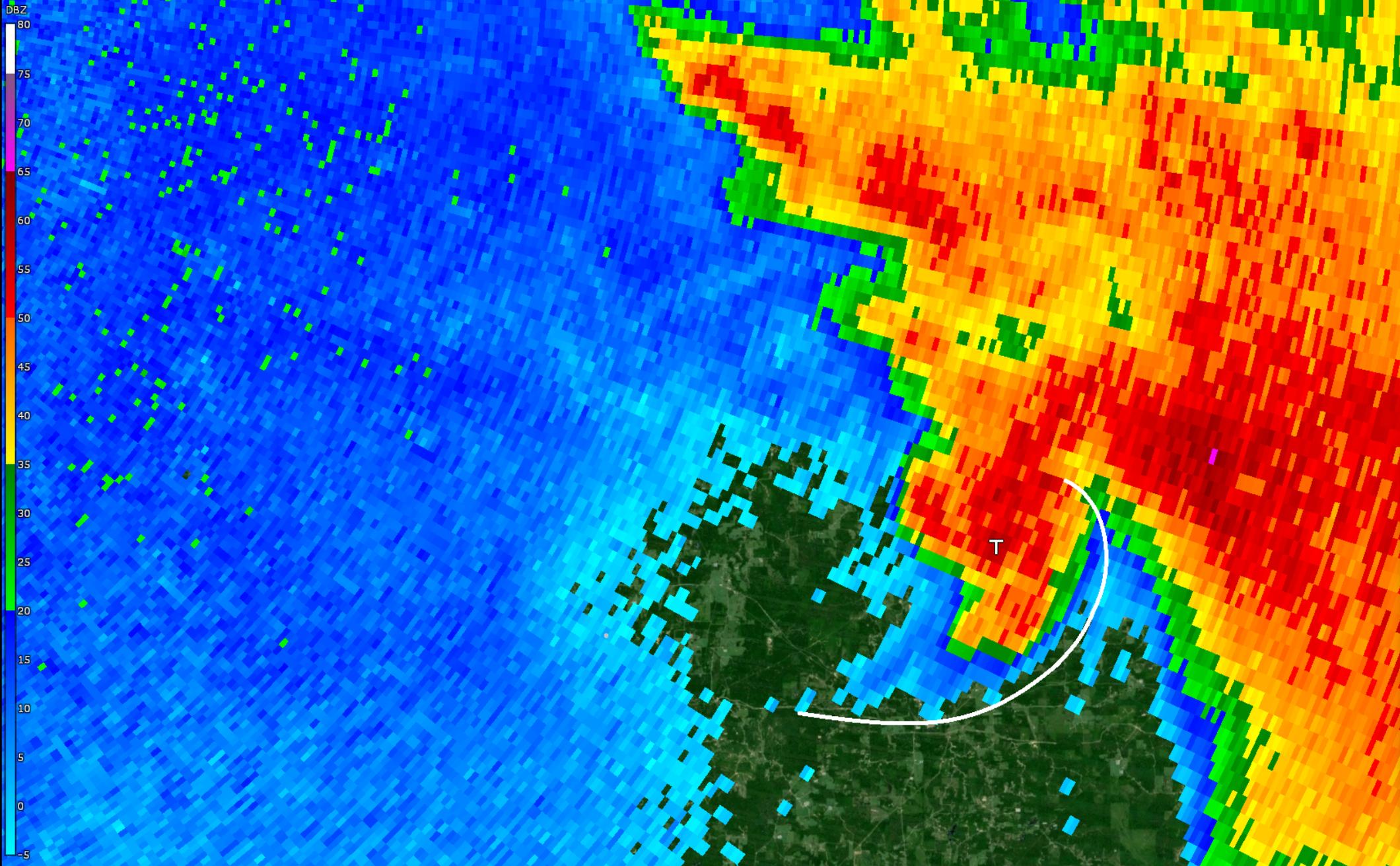
- Select Tilt:
- |       |       |       |       |
|-------|-------|-------|-------|
| 0.4°  | 0.5°  | 0.9°  | 1.4°  |
| 1.8°  | 2.5°  | 3.2°  | 4.0°  |
| 5.1°  | 6.5°  | 8.0°  | 10.0° |
| 12.4° | 15.6° | 19.5° |       |

Product Details:

Max: 66.0 dbz  
Az: 106.3°  
Ran: 41.9 nm

Active Warnings - GR2Analyst

Type	State	C...	Expires



Site: KDGX - MRLE\_3  
VST: 06/19/2023 04:32:50 Z  
Prod: 06/19/2023 04:36:31 Z  
VCP: 212 SMV: ----  
Tilt: 0.351°

- Select Product:
- BR  VIL  ZDR
  - BV  VILD  CC
  - SW  PQSH  PHI
  - SRV  MEHS  KDP
  - ET  NROT  HCA

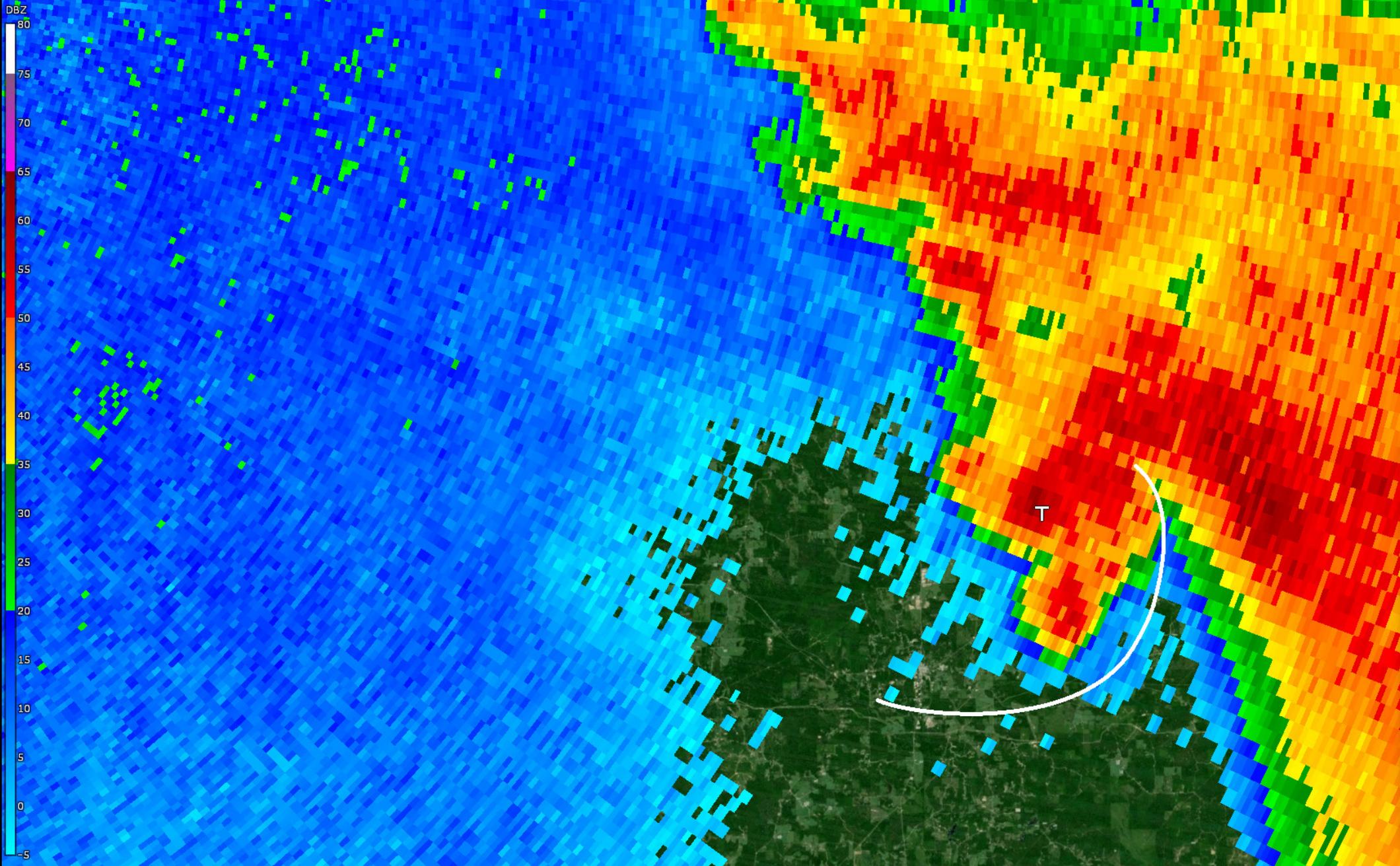
- Select Tilt:
- |       |       |       |       |
|-------|-------|-------|-------|
| 0.4°  | 0.5°  | 0.9°  | 1.4°  |
| 1.8°  | 2.5°  | 3.2°  | 4.0°  |
| 5.1°  | 6.5°  | 8.0°  | 10.0° |
| 12.4° | 15.6° | 19.5° |       |

Product Details:

Max: 65.5 dbz  
Az: 106.8°  
Ran: 43.4 nm

Active Warnings - GR2Analyst

Type	State	C...	Expires



Site: KDGX - MRLE\_3  
 VST: 06/19/2023 04:40:18 Z  
 Prod: 06/19/2023 04:40:18 Z  
 VCP: 212 SMV: ----  
 Tilt: 0.353°

- Select Product:
- BR  VIL  ZDR
  - BV  VILQ  CC
  - SW  PQSH  PHI
  - SRV  MEHS  KDP
  - ET  NROT  HCA

- Select Tilt:
- |       |       |       |       |
|-------|-------|-------|-------|
| 0.4°  | 0.5°  | 0.9°  | 1.4°  |
| 1.8°  | 2.5°  | 3.2°  | 4.0°  |
| 5.1°  | 6.5°  | 8.0°  | 10.0° |
| 12.4° | 15.6° | 19.5° |       |

Product Details:

Max: 65.5 dbz  
 Az: 51.7°  
 Ran: 28.3 nm

Active Warnings - GR2Analyst

Type	State	C...	Expires

# Reflectivity Cross-Section

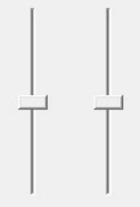
Approx. 1.3 Nautical Miles  
North of Velocity Cross-Section

Volume:  
Date: 06/19/2023  
Time: 03:49:20 Z

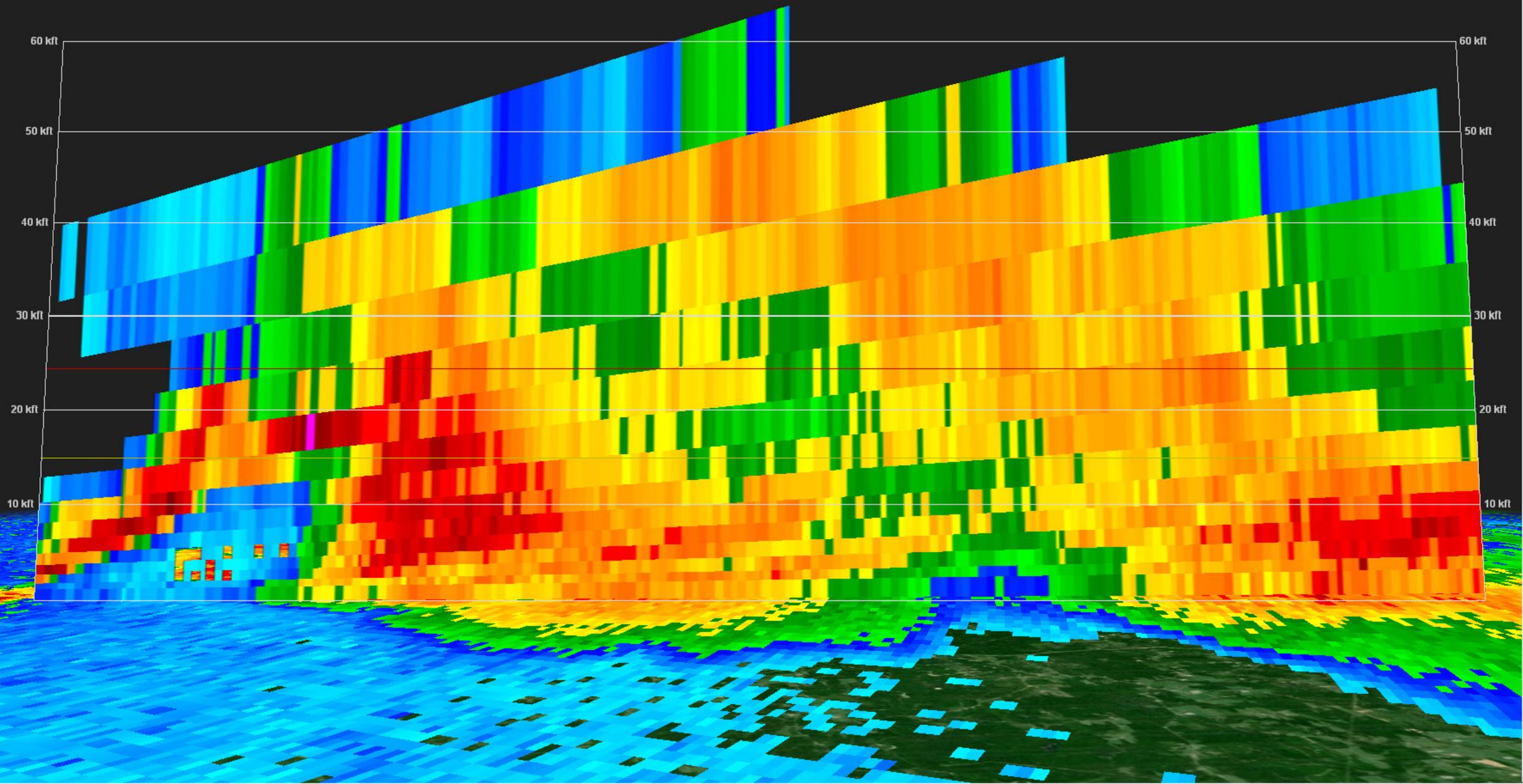
- Select Product:
- BR
  - ZDR
  - BV
  - CC
  - SW
  - PHI
  - SRV
  - KDP

Adjust Slice:

Position    Swing



Smoothing



# Reflectivity Cross-Section

Approx. 1.3 Nautical Miles  
North of Velocity Cross-Section

Volume:  
Date: 06/19/2023  
Time: 03:56:32 Z

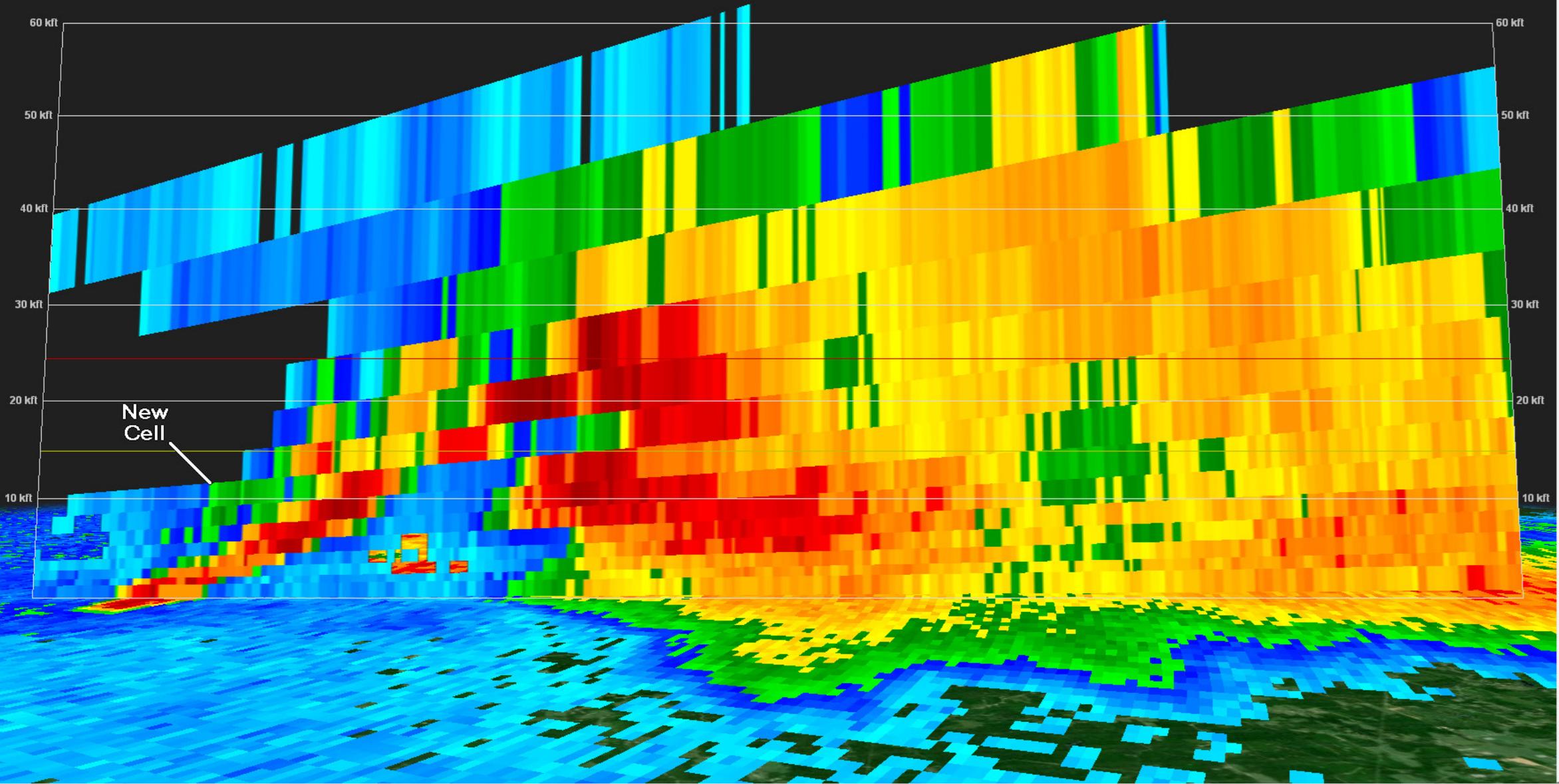
Select Product:

<input checked="" type="radio"/> BR	<input type="radio"/> ZDR
<input type="radio"/> BV	<input type="radio"/> CC
<input type="radio"/> SW	<input type="radio"/> PFI
<input type="radio"/> SRV	<input type="radio"/> KDP

Adjust Slice:

Position	Swing
	

Smoothing



Reflectivity Cross-Section  
Approx. 1.3 Nautical Miles  
North of Velocity Cross-Section

Volume:  
Date: 06/19/2023  
Time: 04:03:43 Z

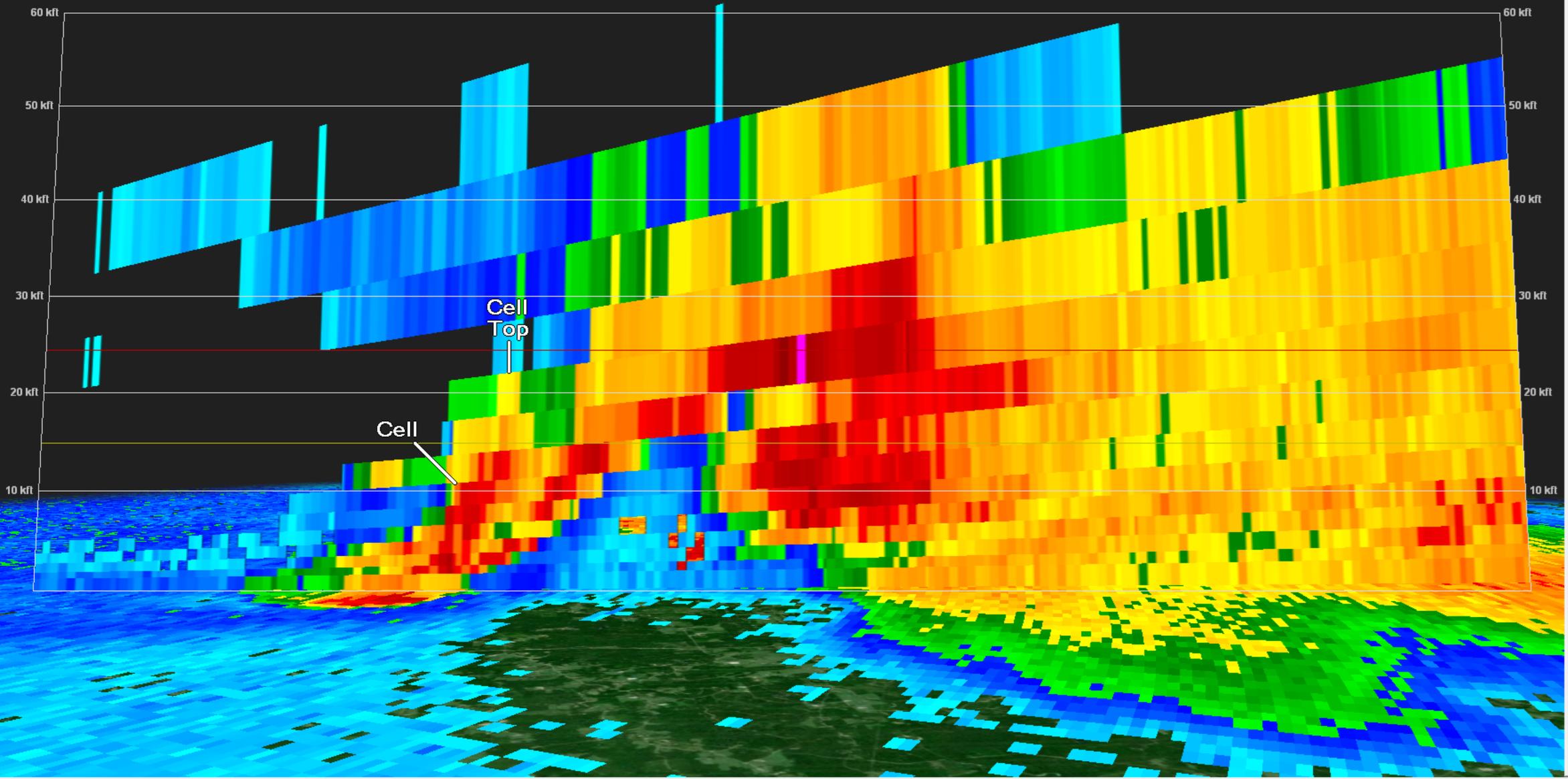
- Select Product:
- BR
  - ZDR
  - BV
  - CC
  - SW
  - PHT
  - SRV
  - KDP

Adjust Slice:

Position

Swing

Smoothing



Reflectivity Cross-Section  
Approx. 1.3 Nautical Miles  
North of Velocity Cross-Section

Volume:  
Date: 06/19/2023  
Time: 04:11:11 Z

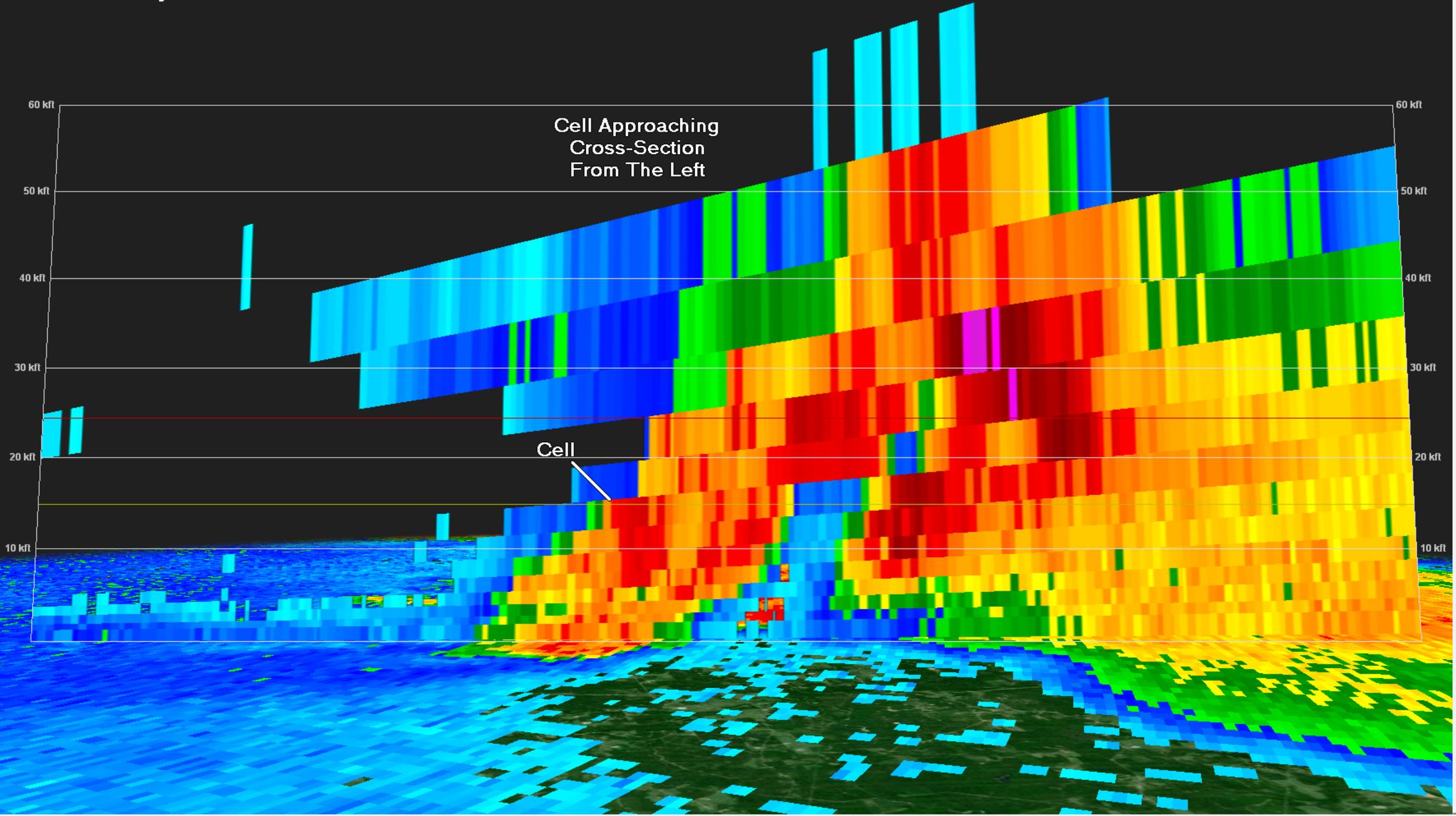
- Select Product:
- BR
  - ZDR
  - BV
  - CC
  - SW
  - PHI
  - SRV
  - KDP

Adjust Slice:

Position

Swing

Smoothing



Reflectivity Cross-Section  
Approx. 1.3 Nautical Miles  
North of Velocity Cross-Section

Volume:  
Date: 06/19/2023  
Time: 04:18:11 Z

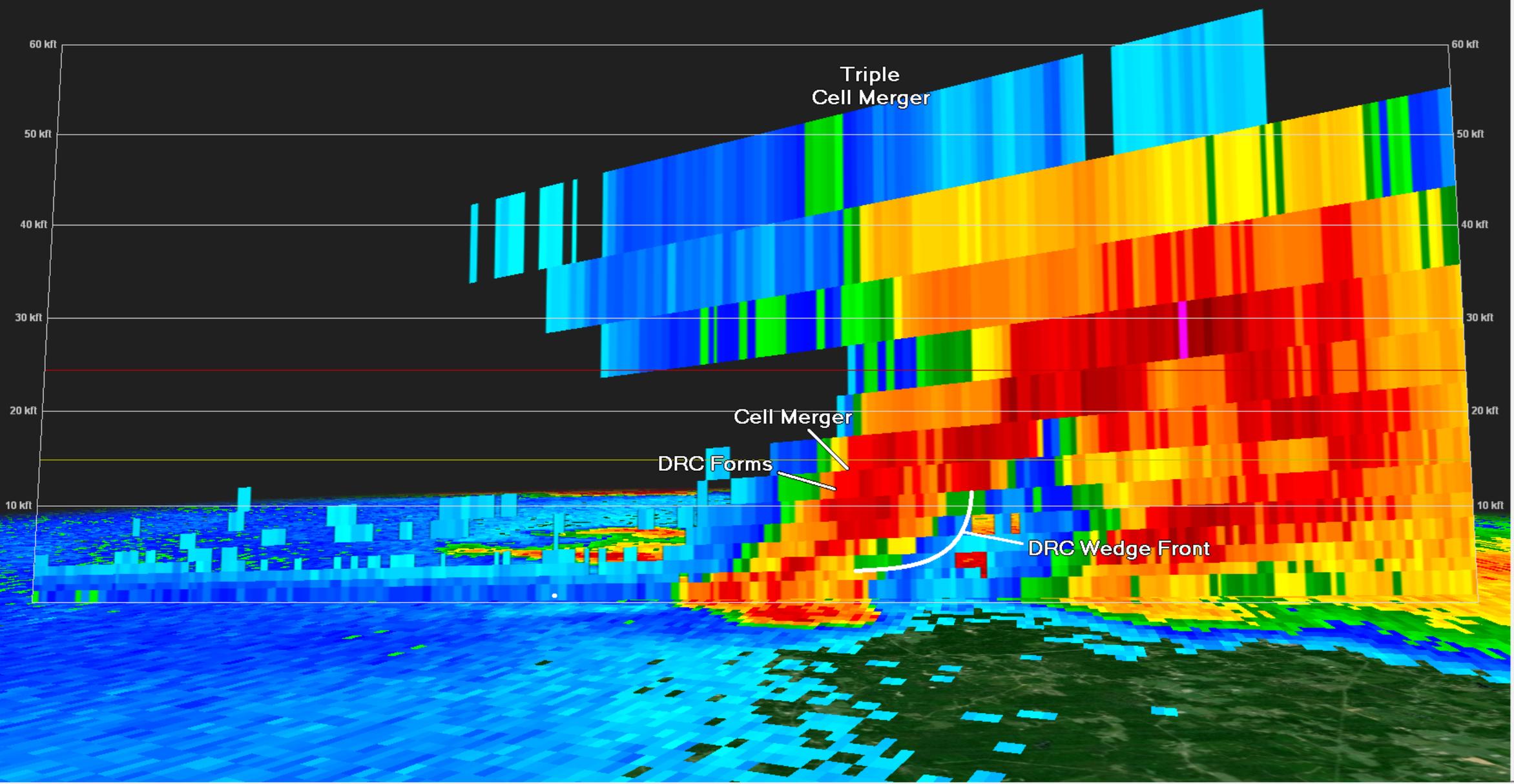
- Select Product:
- BR
  - ZDR
  - BV
  - CC
  - SW
  - PHT
  - SRV
  - KDP

Adjust Slice:

Position

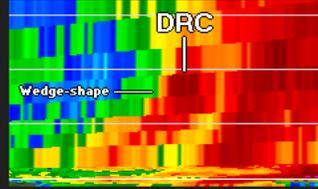
Swing

Smoothing

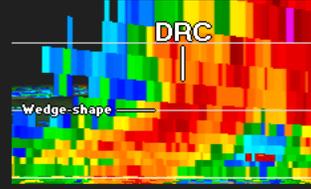


# Reflectivity Cross-Section Approximately 500 feet North of Velocity Cross-Section

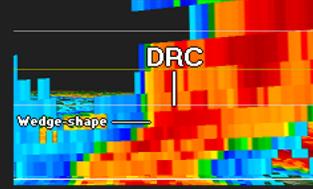
Chetek, WI EF3  
May 16, 2017



New Orleans East, LA EF3  
Feb 7, 2017



Louin, MS EF3  
Jun 17, 2023



Volume:  
Date: 06/19/2023  
Time: 04:25:39 Z

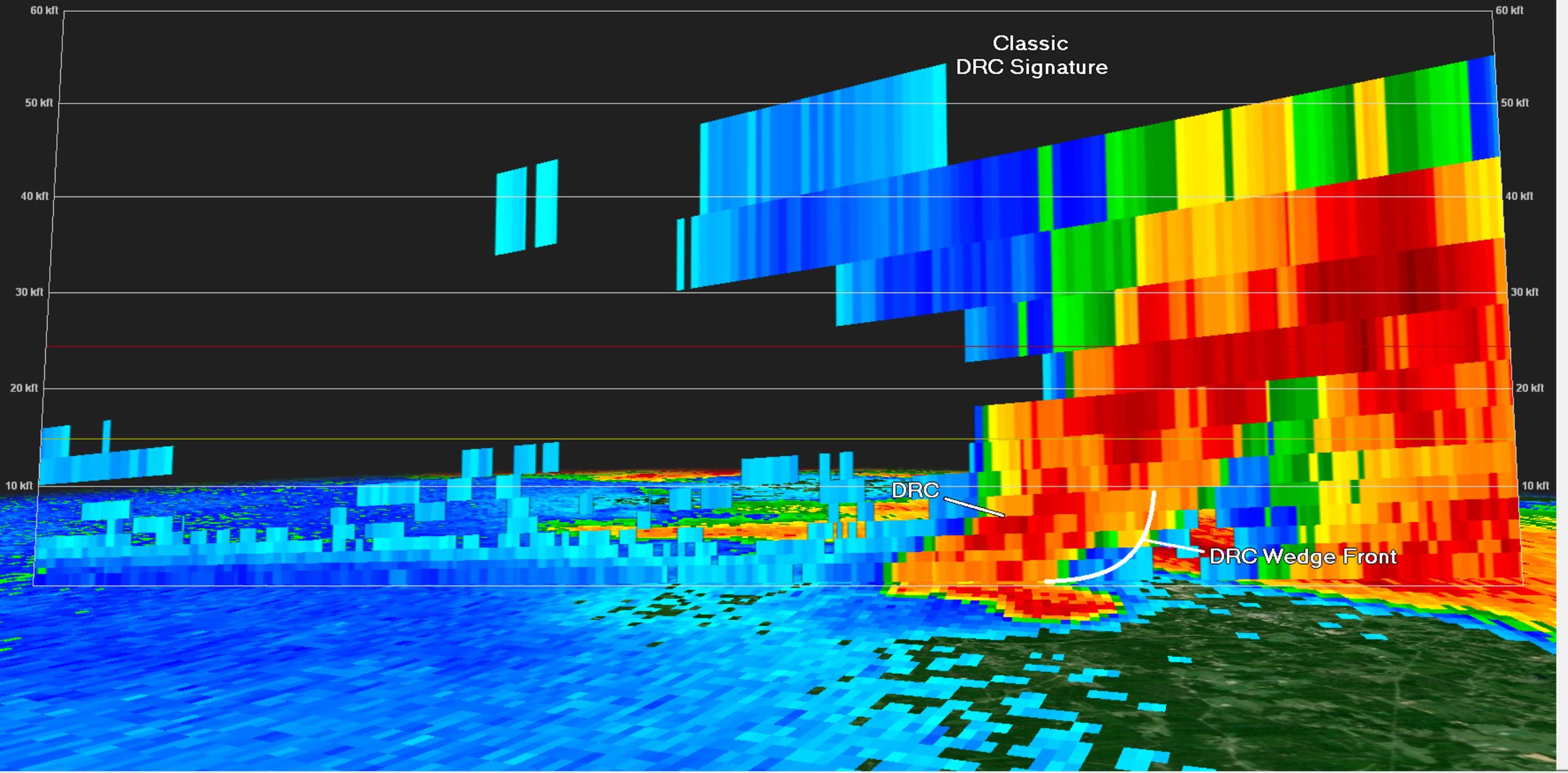
- Select Product:
- BR
  - ZDR
  - BV
  - CC
  - SW
  - PHI
  - SRV
  - KDP

Adjust Slice:

Position

Swing

Smoothing



Reflectivity Cross-Section  
Approximately 500 feet  
North of Velocity Cross-Section

Volume:  
Date: 06/19/2023  
Time: 04:32:50 Z

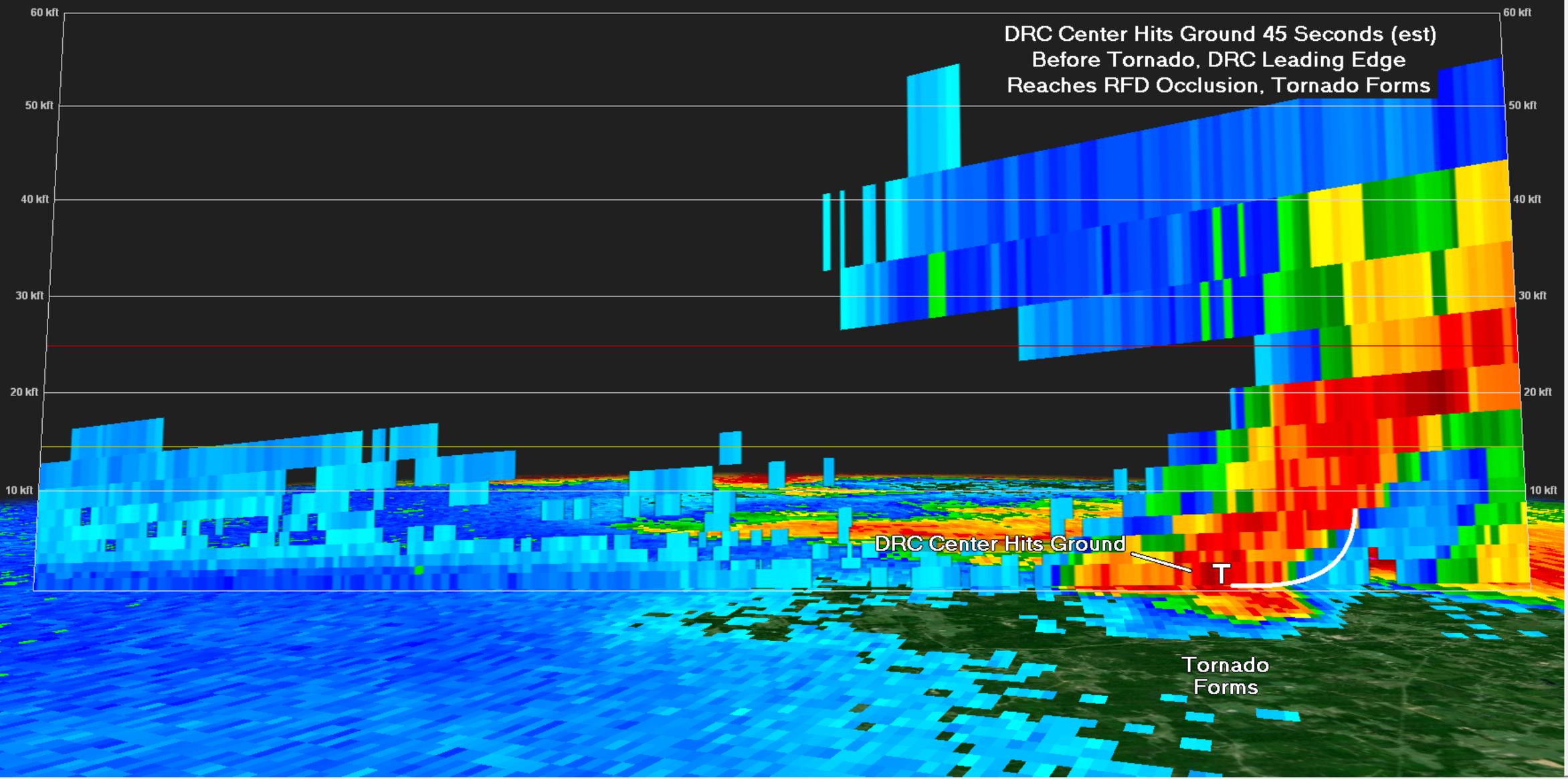
- Select Product:
- BR
  - ZDR
  - BV
  - CC
  - SW
  - PHI
  - SRV
  - KDP

Adjust Slice:

Position

Swing

Smoothing



# Reflectivity Cross-Section

Approximately 500 feet  
South of Velocity Cross-Section

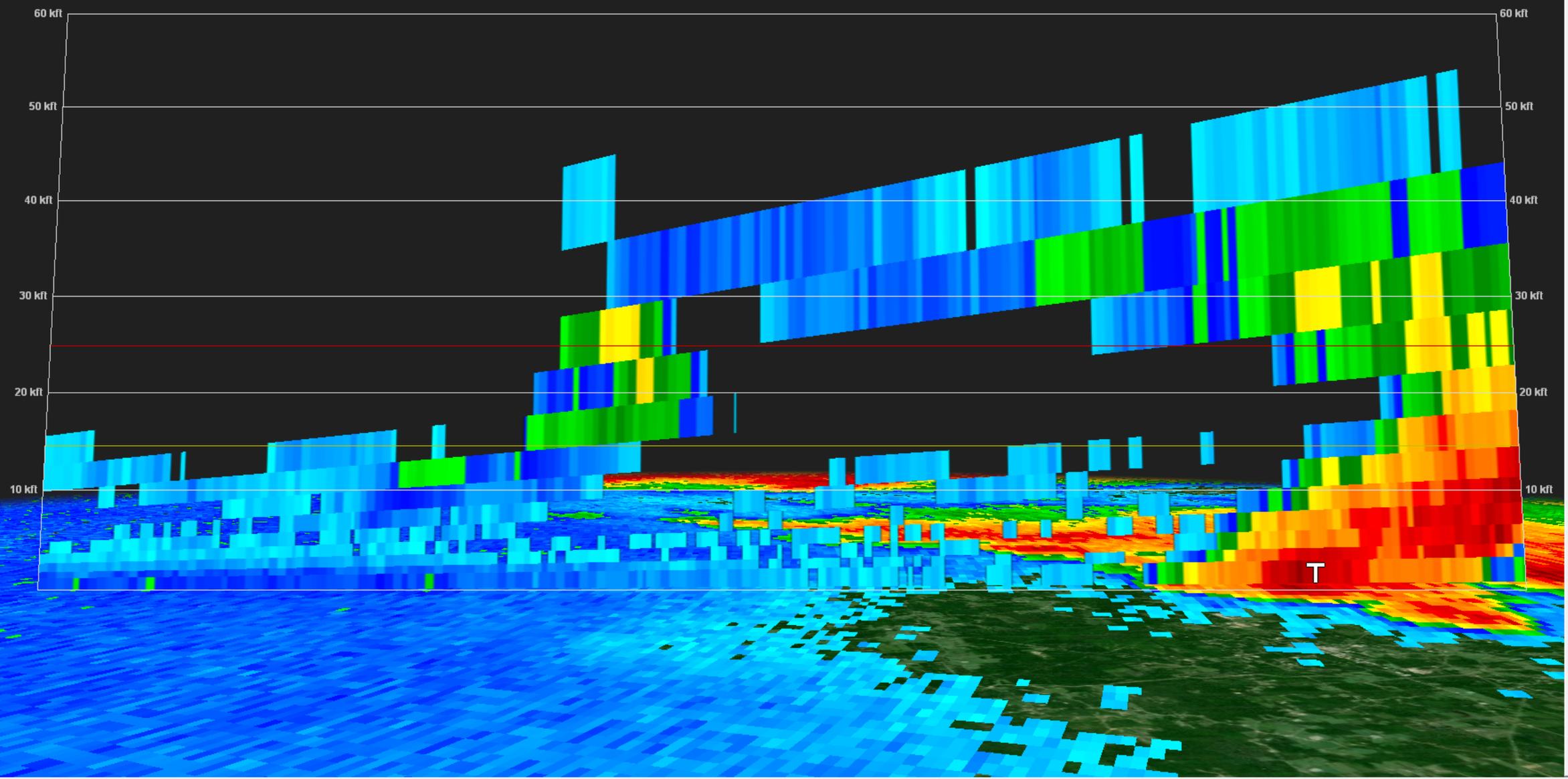
Volume:  
Date: 06/19/2023  
Time: 04:40:18 Z

- Select Product:
- BR
  - ZDR
  - BV
  - CC
  - SW
  - PHI
  - SRV
  - KDP

Adjust Slice:

Position  Swing

Smoothing



T

# Velocity Cross-Section

Approx. 1.3 Nautical Miles  
South of Reflectivity Cross-Section

Volume:  
Date: 06/19/2023  
Time: 03:49:20 Z

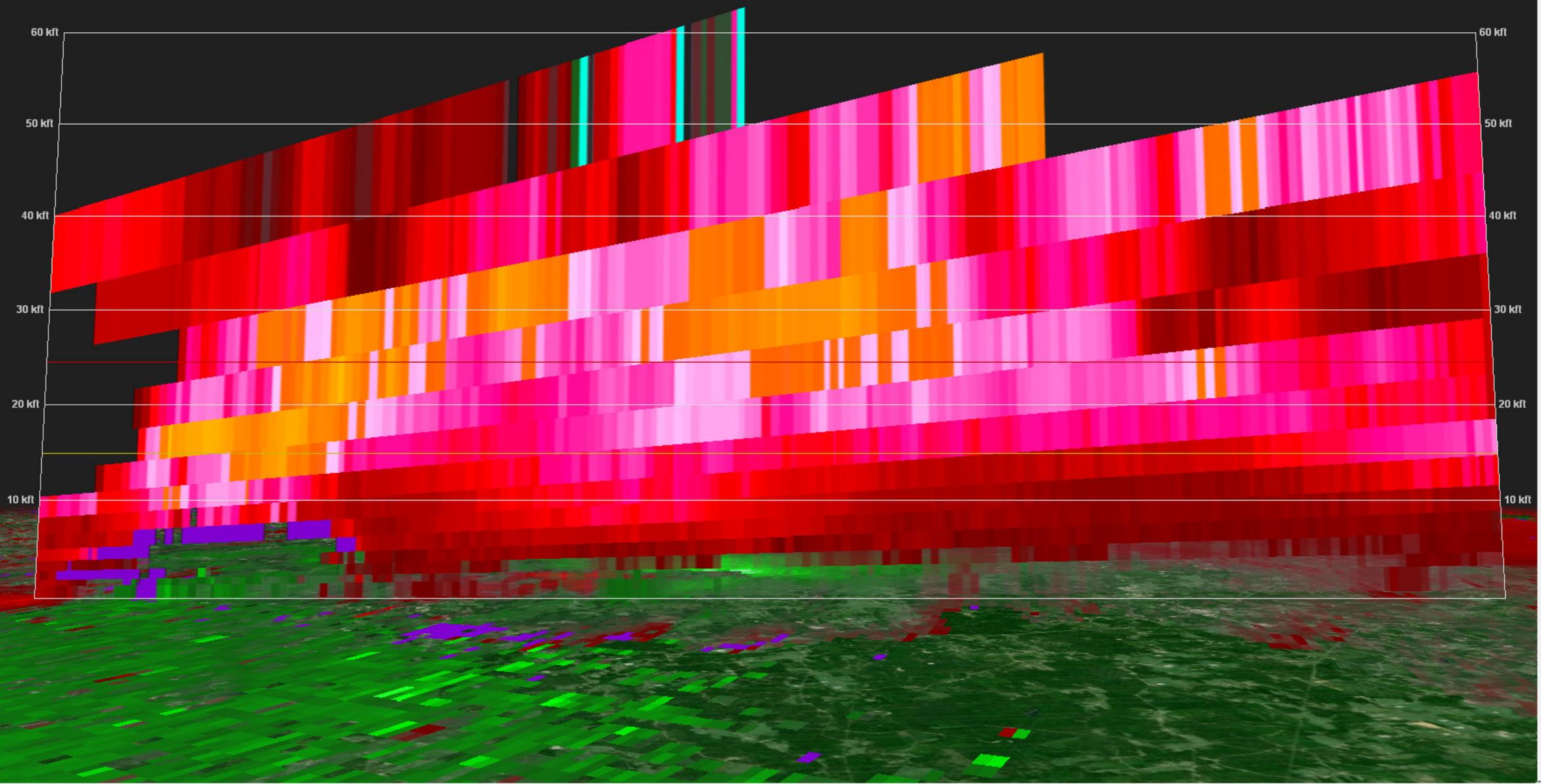
Select Product:

<input type="radio"/> BR	<input type="radio"/> ZDR
<input checked="" type="radio"/> BV	<input type="radio"/> CC
<input type="radio"/> SW	<input type="radio"/> PHI
<input type="radio"/> SRV	<input type="radio"/> KDP

Adjust Slice:

Position	Swing

Smoothing



# Velocity Cross-Section

Approx. 1.3 Nautical Miles  
South of Reflectivity Cross-Section

Volume:  
Date: 06/19/2023  
Time: 03:56:32 Z

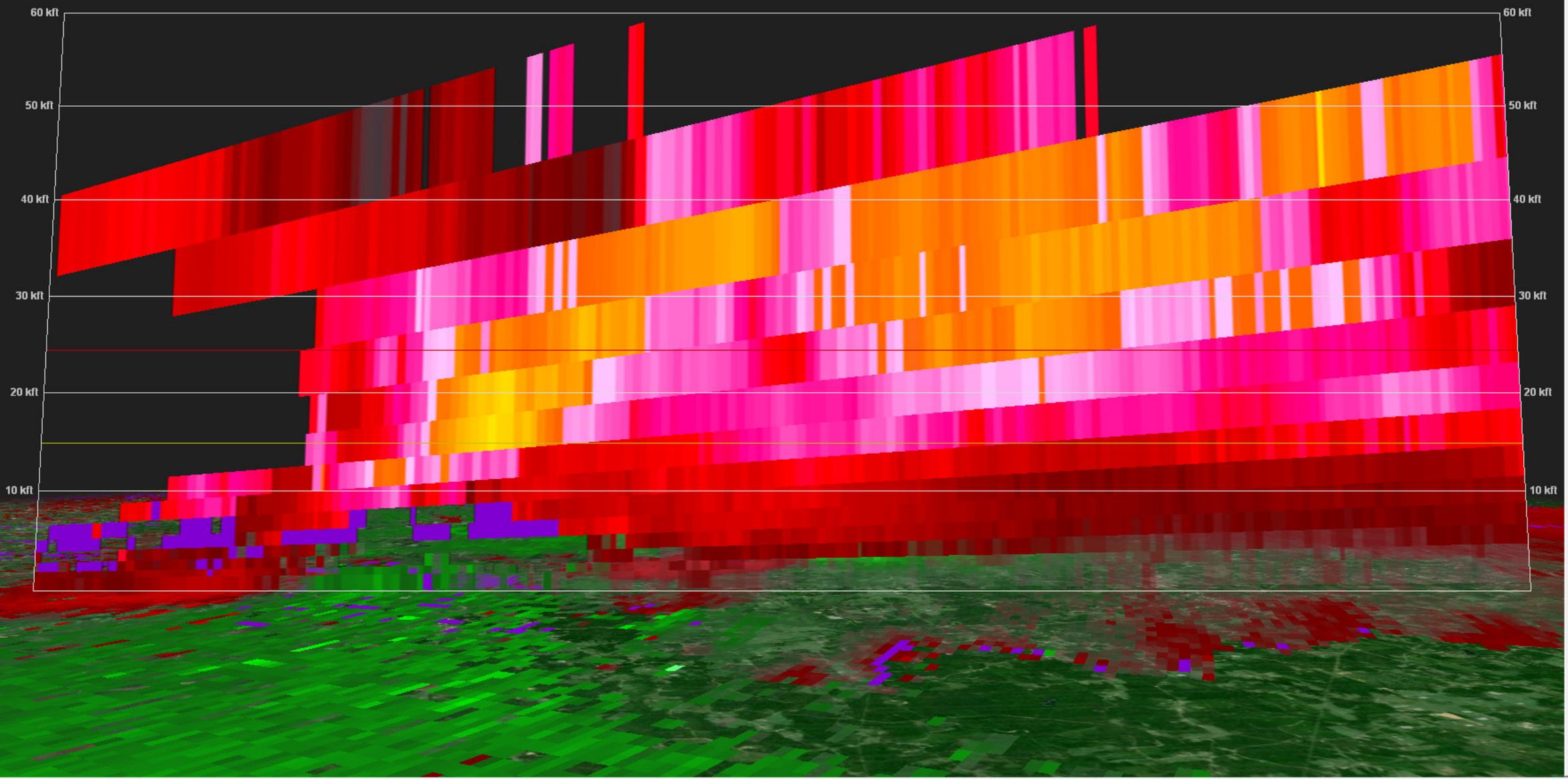
- Select Product:
- BR
  - ZDR
  - BV
  - CC
  - SW
  - PHI
  - SRV
  - KDP

Adjust Slice:

Position  Swing



Smoothing



Velocity Cross-Section  
Approx. 1.3 Nautical Miles  
South of Reflectivity Cross-Section

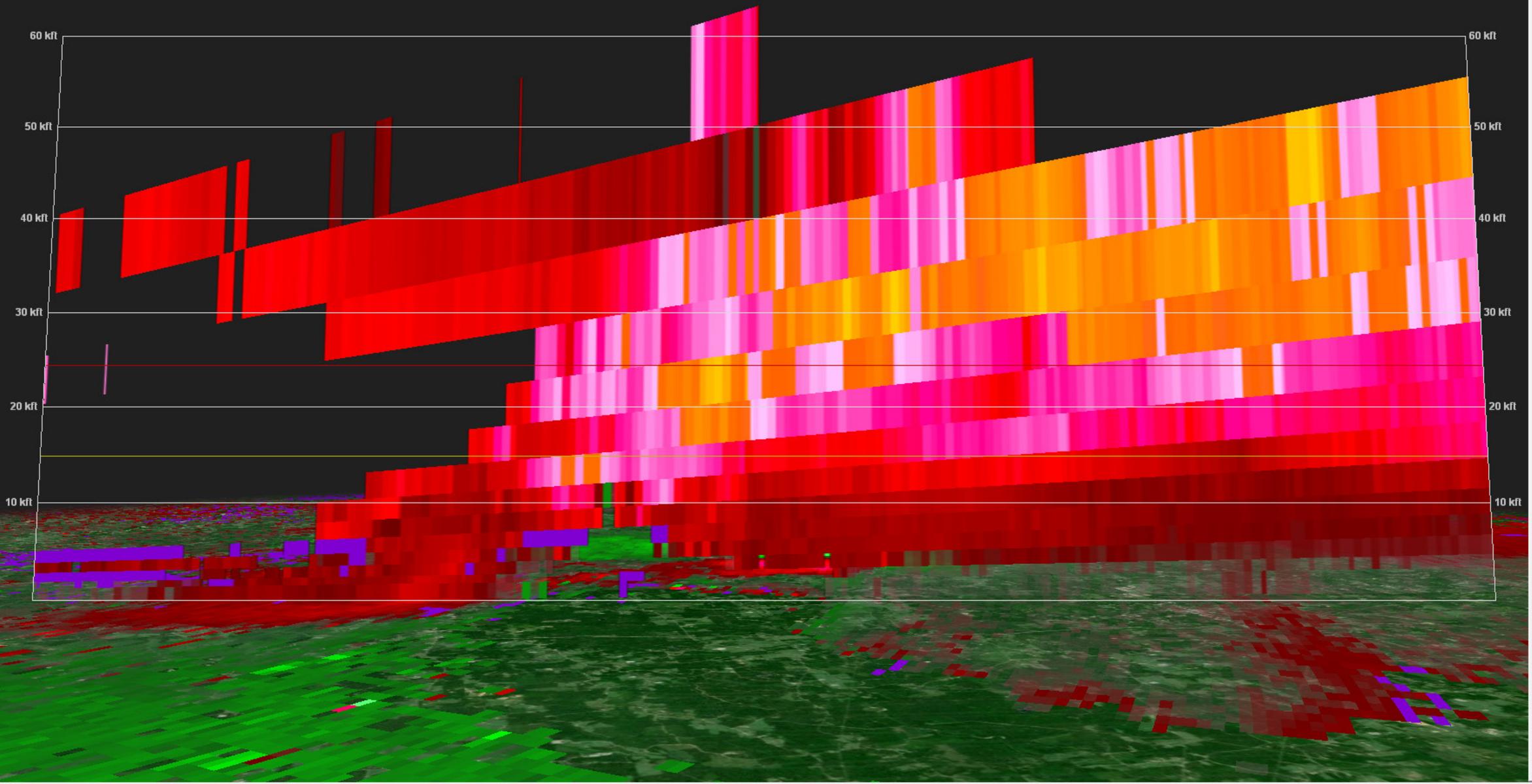
Volume:  
Date: 06/19/2023  
Time: 04:03:43 Z

- Select Product:
- BR
  - ZDR
  - BV
  - CC
  - SW
  - PHI
  - SRV
  - KDP

Adjust Slice:

Position  Swing

Smoothing



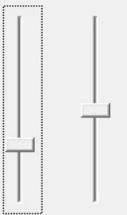
Velocity Cross-Section  
Approx. 1.3 Nautical Miles  
South of Reflectivity Cross-Section

Volume:  
Date: 06/19/2023  
Time: 04:11:11 Z

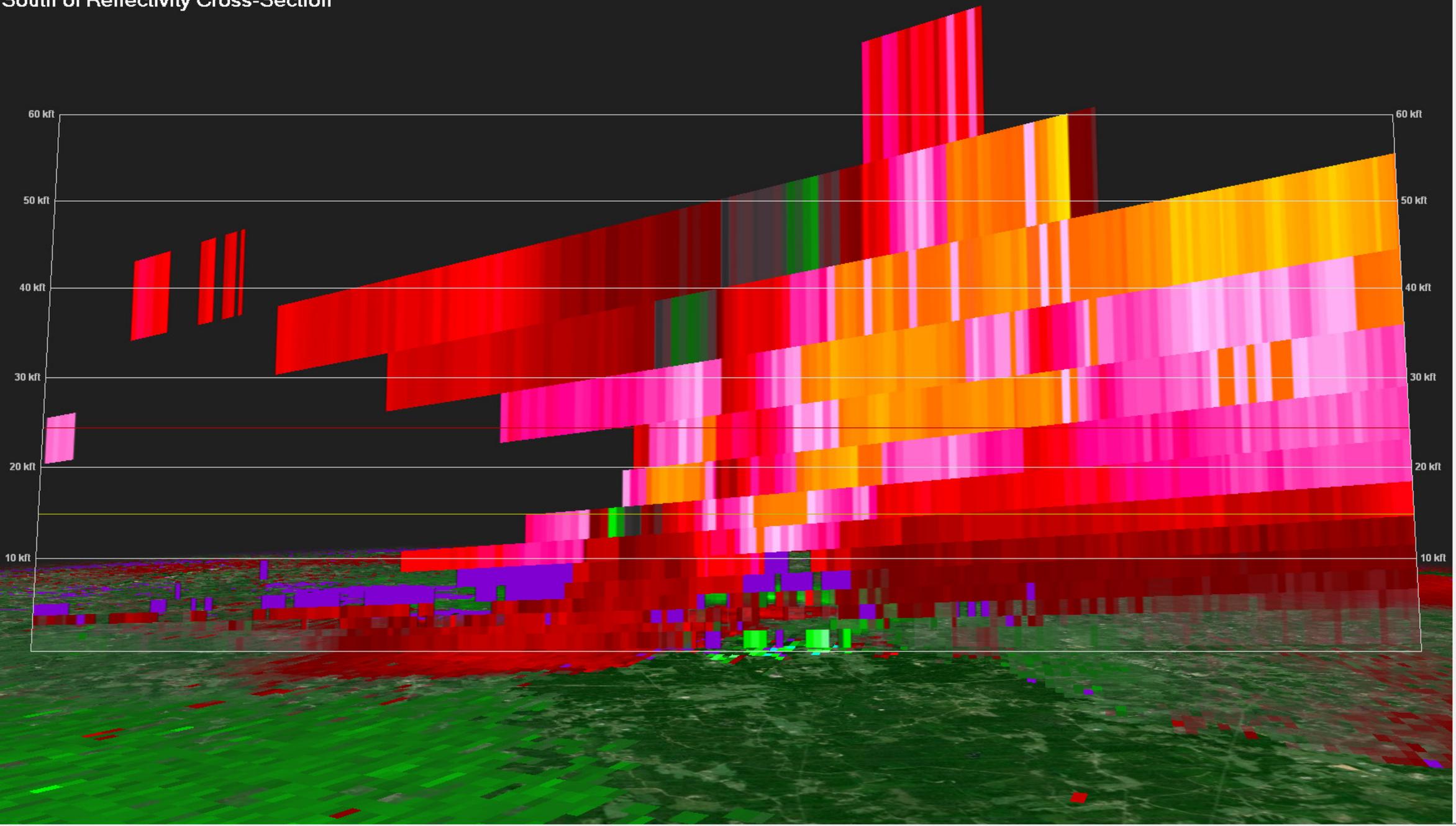
- Select Product:
- BR
  - ZDR
  - BV
  - CC
  - SW
  - PHI
  - SRV
  - KDP

Adjust Slice:

Position  Swing



Smoothing



Velocity Cross-Section  
Approx. 1.3 Nautical Miles  
South of Reflectivity Cross-Section

Volume:  
Date: 06/19/2023  
Time: 04:18:11 Z

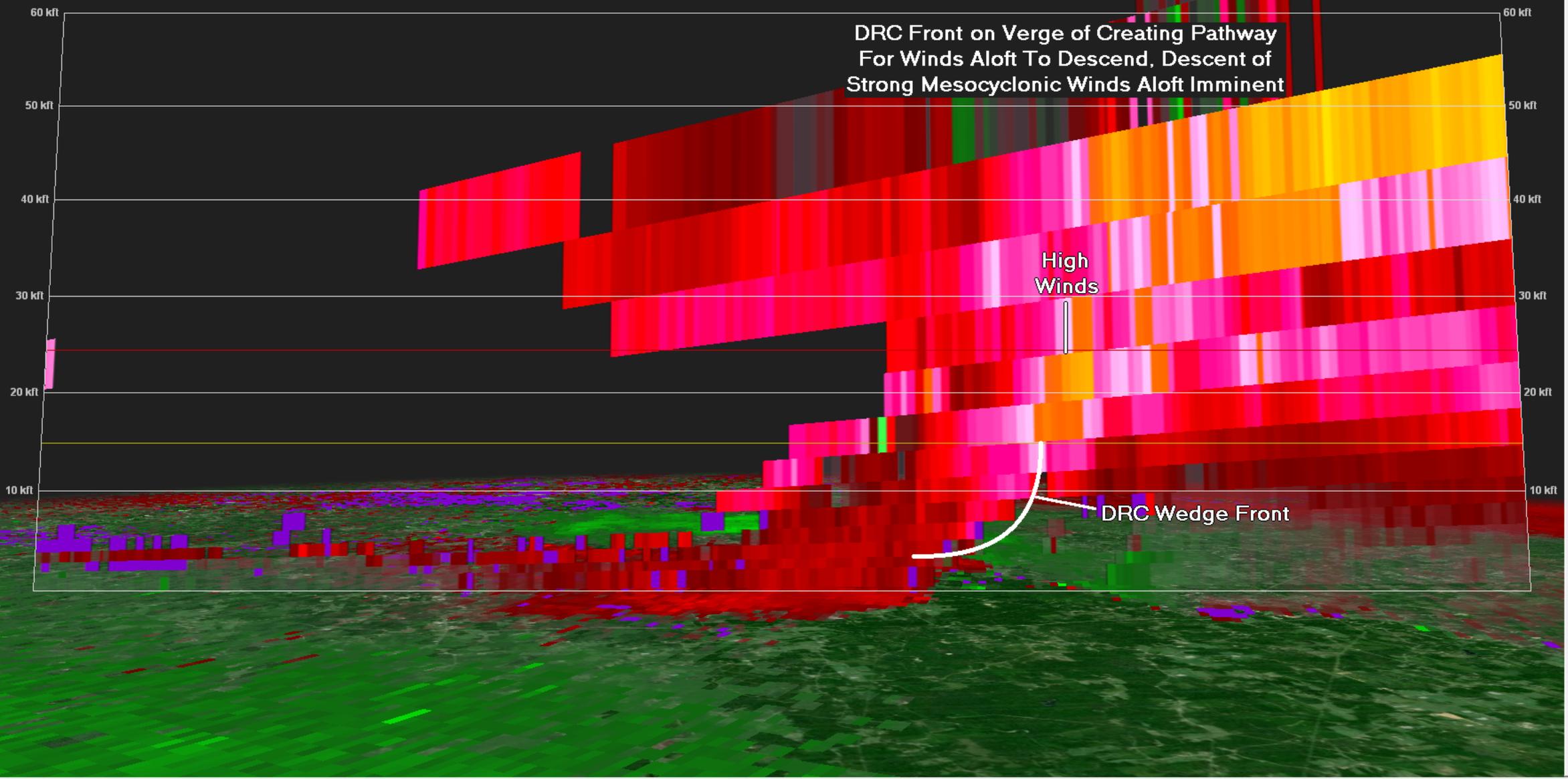
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<input checked="" type="radio"/> BV	<input type="radio"/> CC
<input type="radio"/> SW	<input type="radio"/> PHI
<input type="radio"/> SRV	<input type="radio"/> KDP

Adjust Slice:

Position	Swing

Smoothing



Velocity Cross-Section  
Approximately 500 feet  
South of Reflectivity Cross-Section

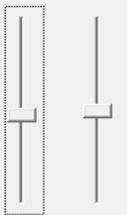
Volume:  
Date: 06/19/2023  
Time: 04:25:39 Z

- Select Product:
- BR
  - ZDR
  - BV
  - CC
  - SW
  - PHT
  - SRV
  - KDP

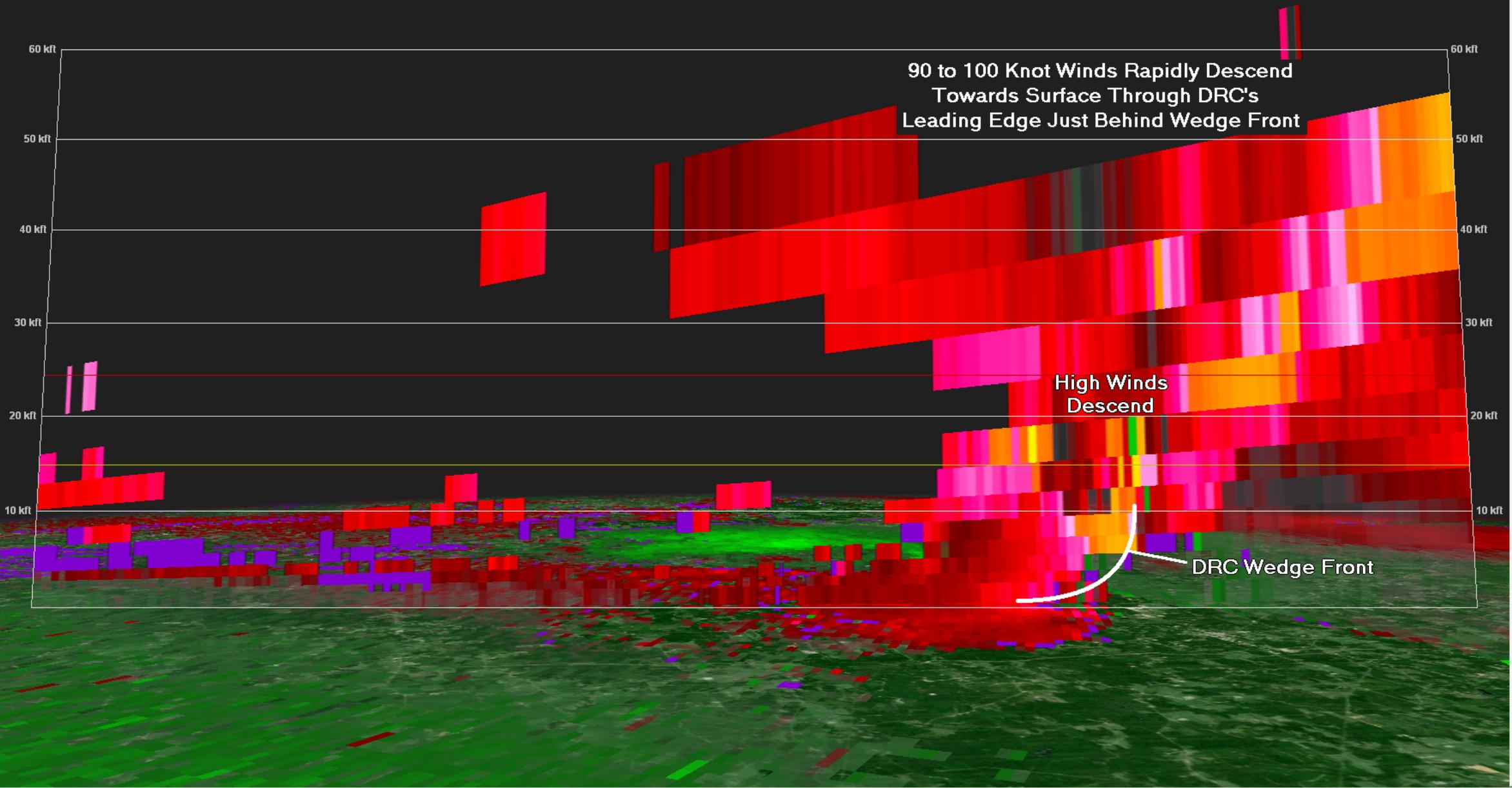
Adjust Slice:

Position

Swing



Smoothing



Velocity Cross-Section  
Approximately 500 feet  
South of Reflectivity Cross-Section

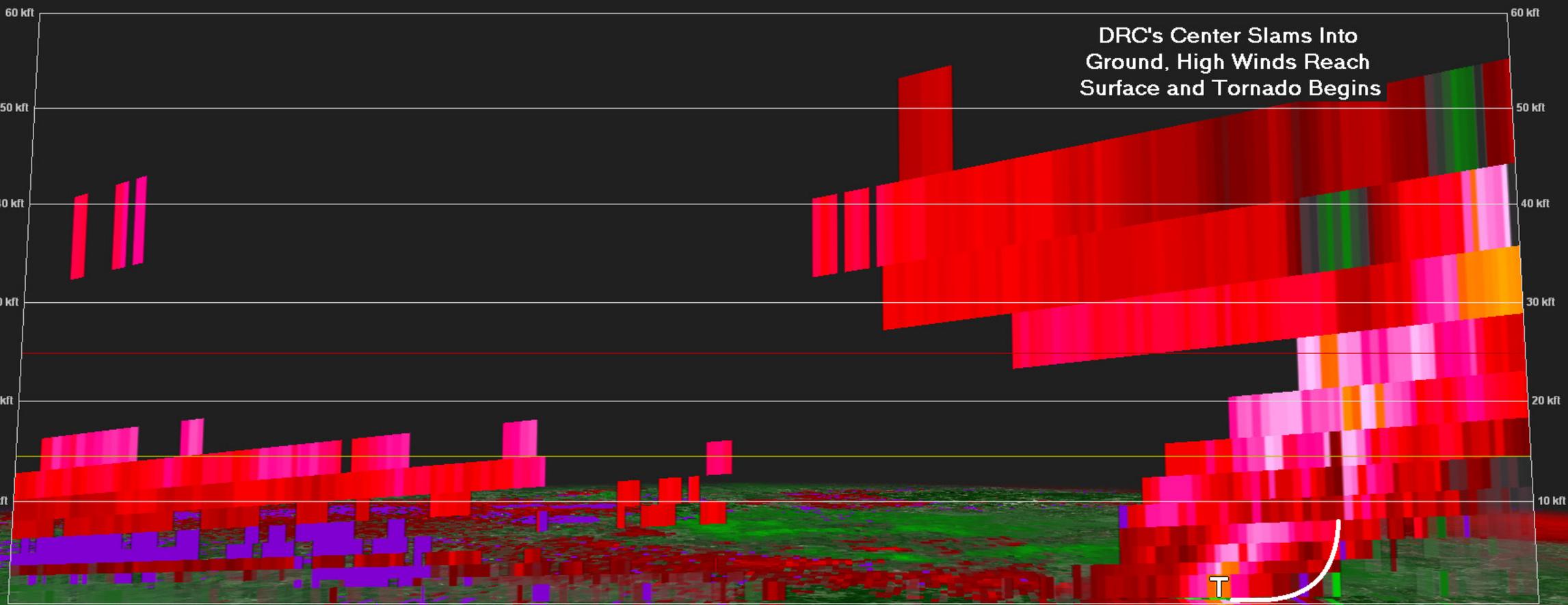
Volume:  
Date: 06/19/2023  
Time: 04:32:50 Z

- Select Product:
- BR
  - ZDR
  - BV
  - CC
  - SW
  - PHT
  - SRV
  - KDP

Adjust Slice:

Position  Swing

Smoothing



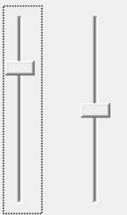
# Velocity Cross-Section Approximately 500 feet North of Reflectivity Cross-Section

Volume:  
Date: 06/19/2023  
Time: 04:40:18 Z

- Select Product:
- BR
  - ZDR
  - BV
  - CC
  - SW
  - PHI
  - SRV
  - KDP

Adjust Slice:

Position  Swing



Smoothing

