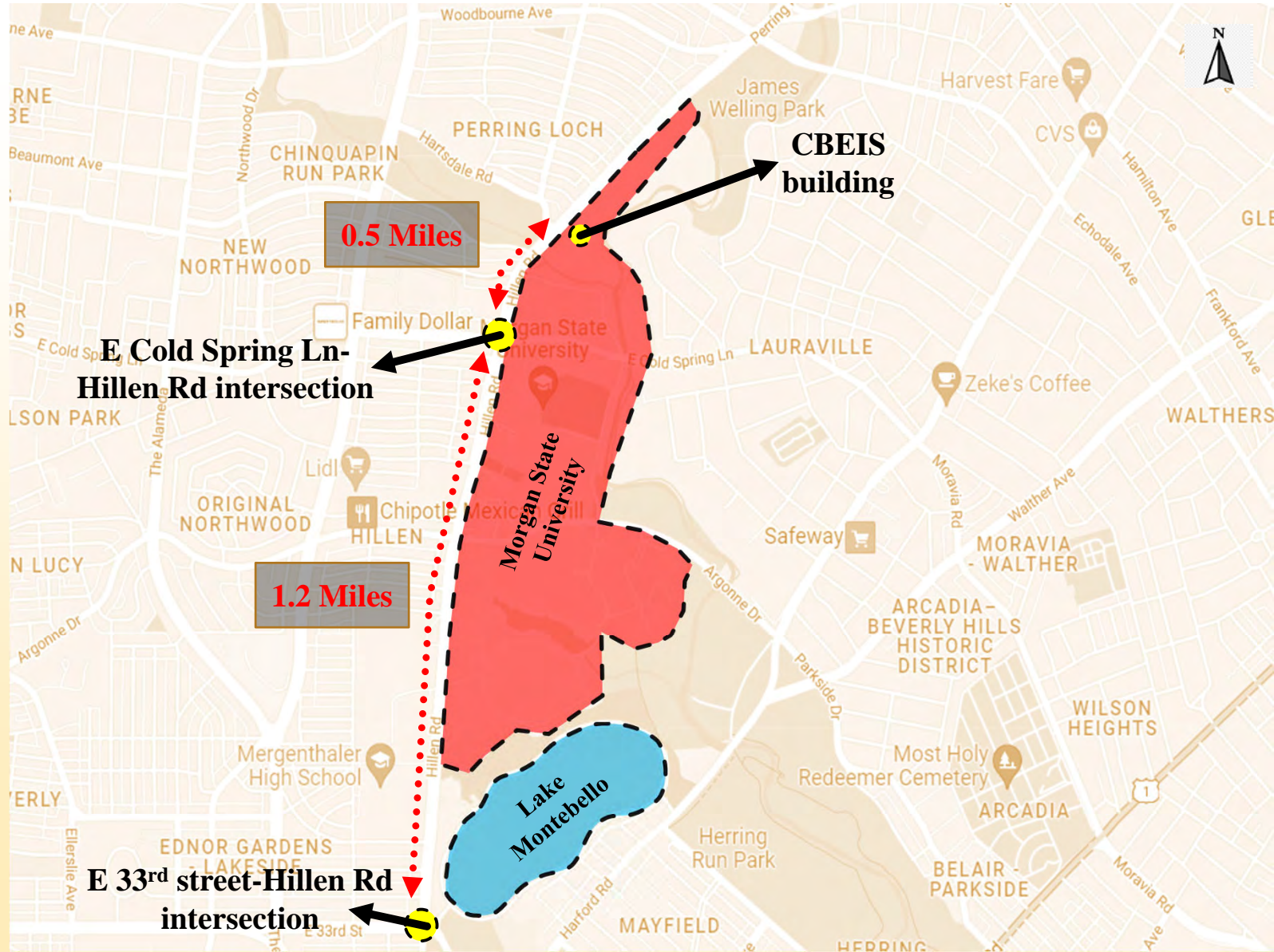# CAV Testbed at Morgan State University

1

**The National Transportation Center**

**Morgan State University**

# Research Area



CBEIS building

0.5 Miles

E Cold Spring Ln-Hillen Rd intersection

Morgan State University

1.2 Miles

Lake Montebello

E 33rd street-Hillen Rd intersection

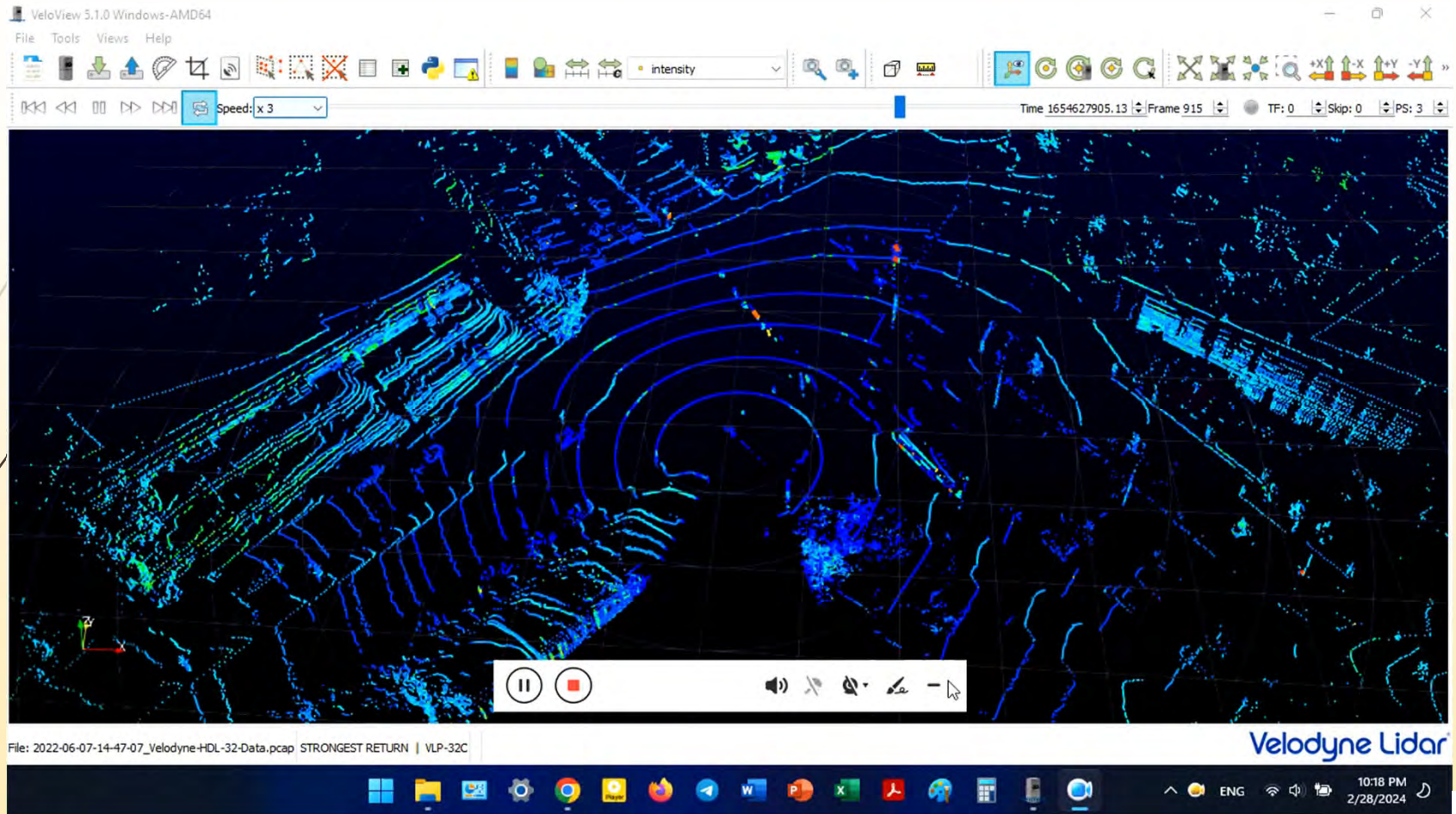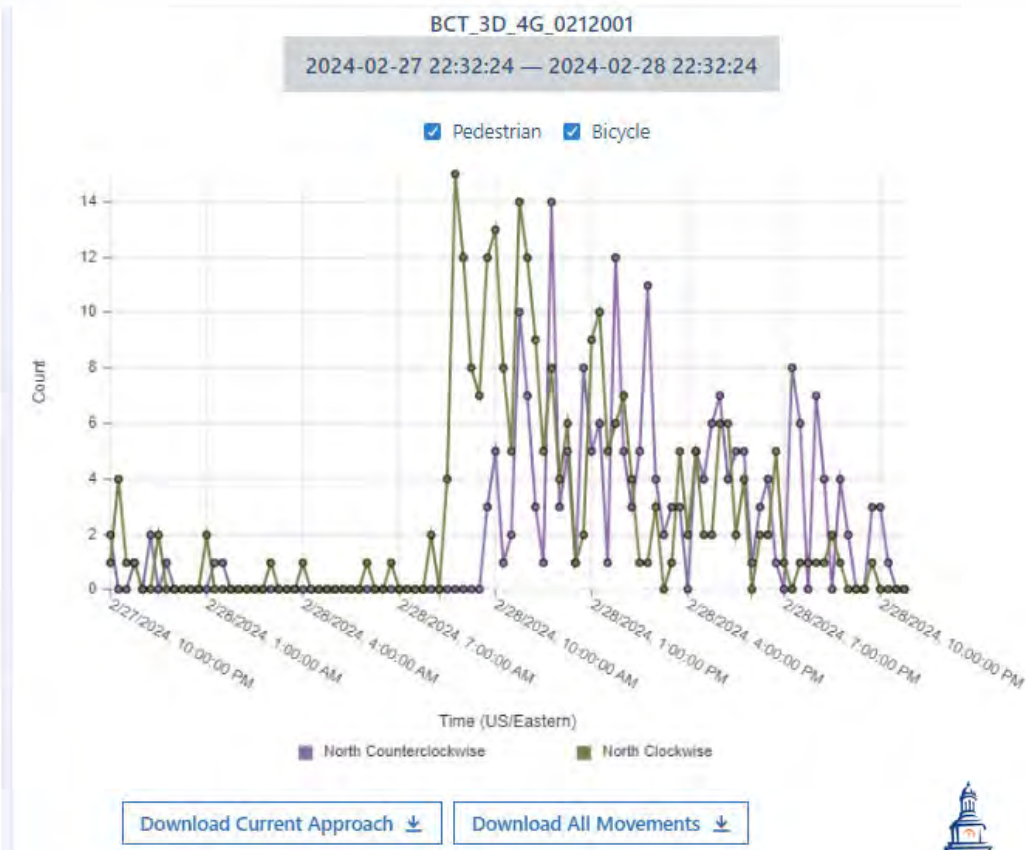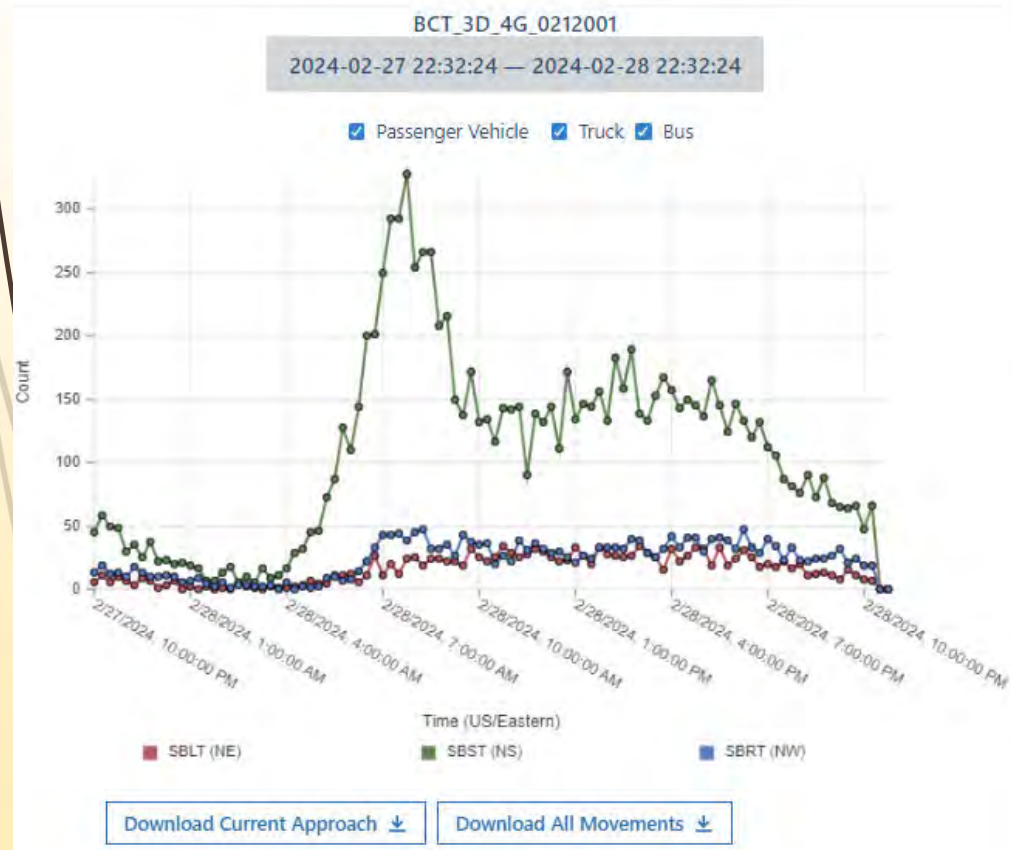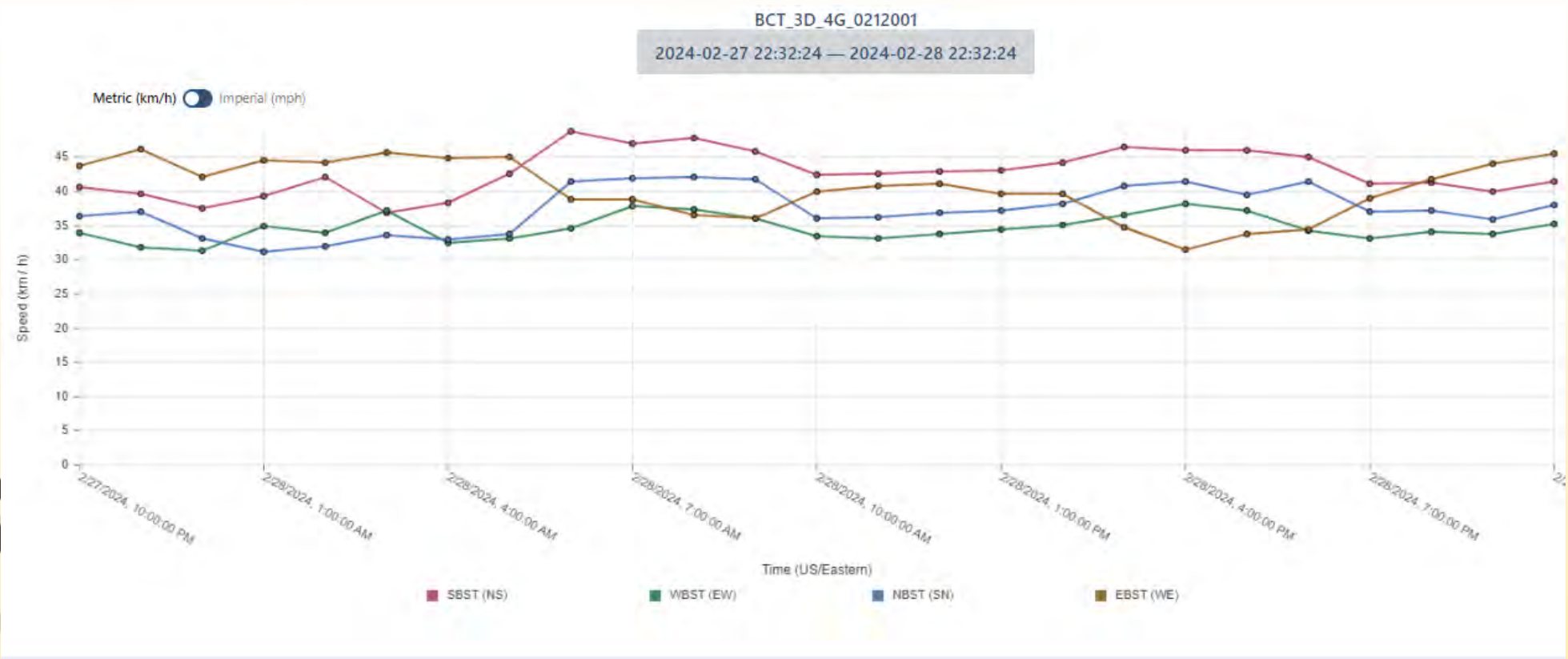# ECS & Hillen Road and 33rd Intersection

# Equipment

# 3D Point Cloud Data (Veloview Software)
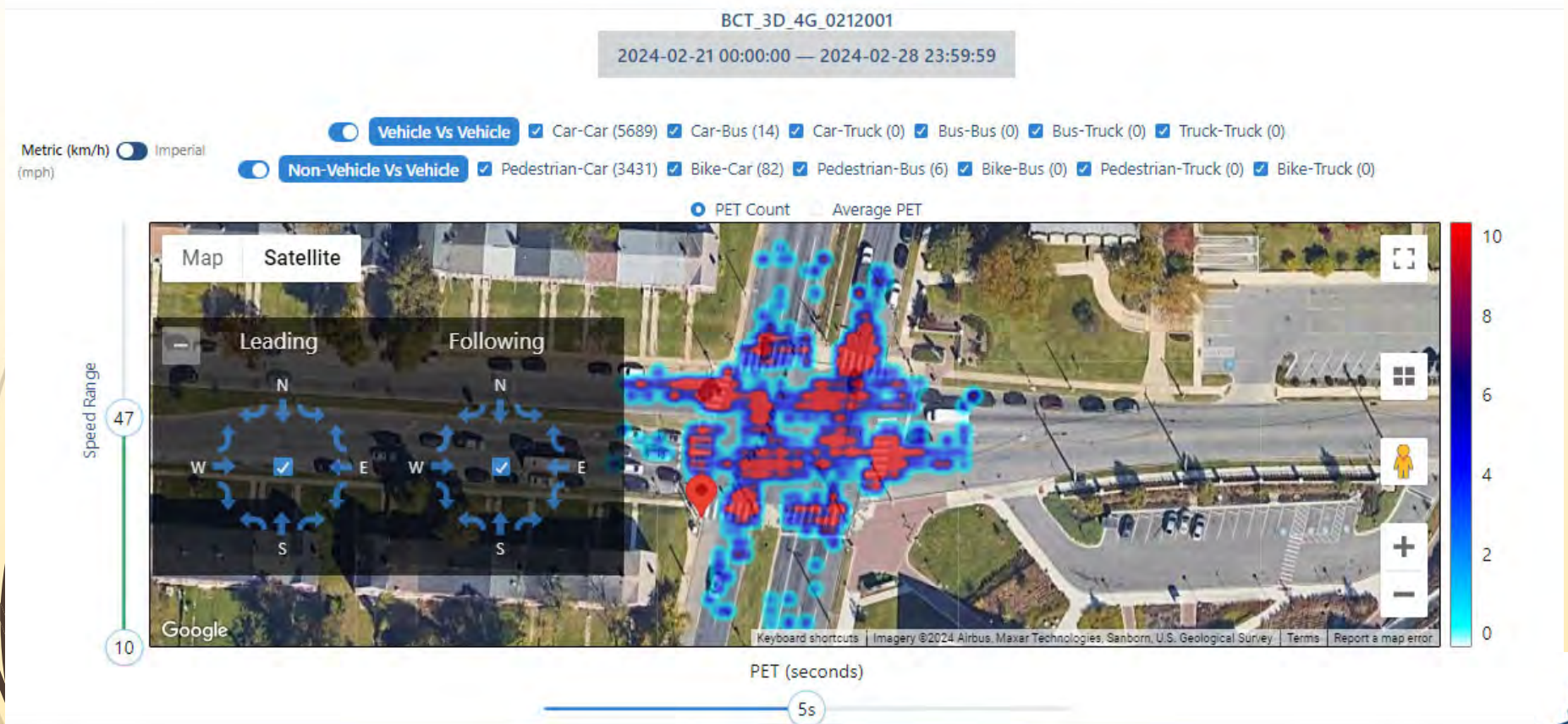
# LiDAR Dashboard- Count Data

# LiDAR Dashboard- Speed Data

# LiDAR Dashboard- Near-Miss Events

# LiDAR Dashboard- Near-Miss Events



**PET Details**
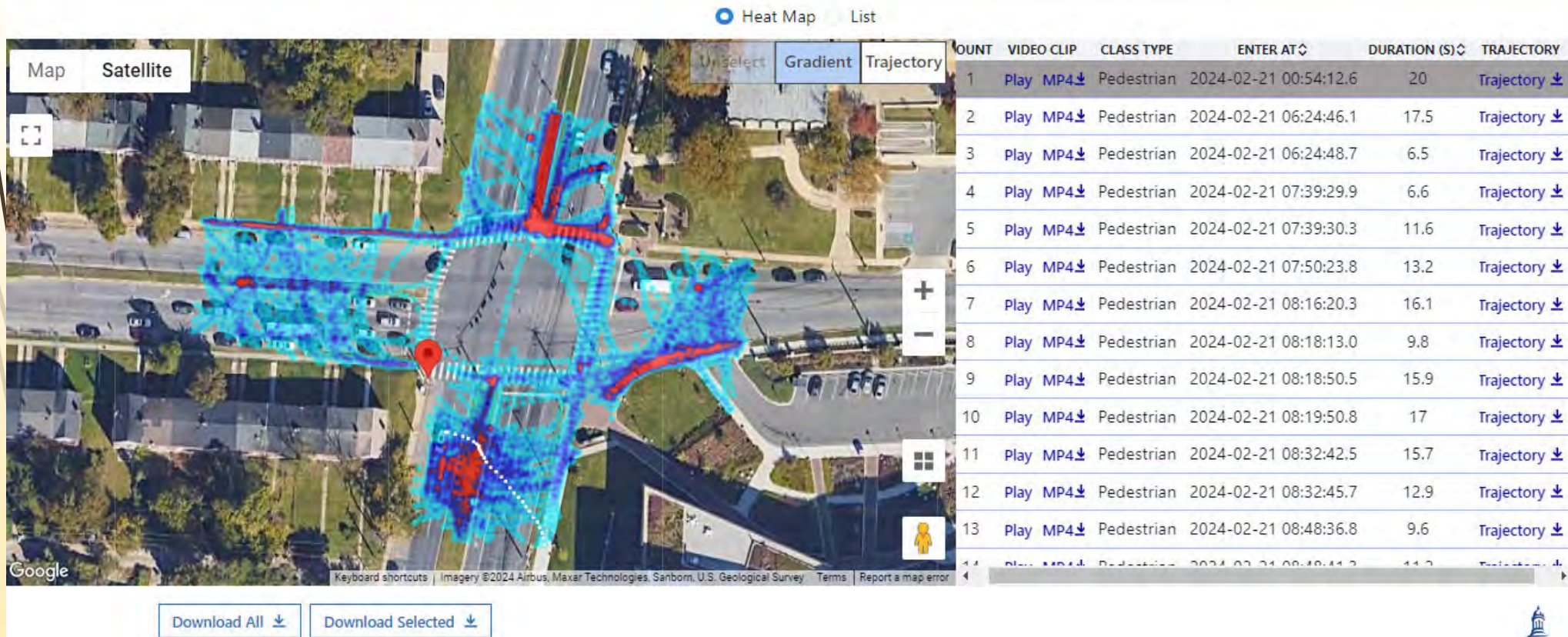
**Sensor:** BCT_3D_4G_0212001

Download Excel Spreadsheet

| COUNT | PET VALUE(s) | SPEED(km/h) | VIDEO CLIP | LEADING OBJ. | FOLLOWING OBJ. | LEADING MOV. | FOLLOWING MOV. | TIMESTAMP | LOCATION |
|---|---|---|---|---|---|---|---|---|---|
| 9 | 4.7 | 13.1 | Play MP4⬇ | Car | Car | NBLT (SW) | SBST (NS) | 2024/02/21 01:21:07.7 | 39.34592, -76.58614 |
| 10 | 3.1 | 16.7 | Play MP4⬇ | Car | Car | NBST (SN) | SBLT (NE) | 2024/02/21 02:47:18.6 | 39.3459, -76.58598 |
| 11 | 1.2 | 15.3 | Play MP4⬇ | Car | Car | WBST (EW) | EBLT (WN) | 2024/02/21 03:24:22.1 | 39.3459, -76.58602 |
| 12 | 2.9 | 15.8 | Play MP4⬇ | Car | Car | WBST (EW) | EBLT (WN) | 2024/02/21 04:18:41.0 | 39.3459, -76.58602 |
| 13 | 4.9 | 14.5 | Play MP4⬇ | Car | Car | SBLT (NE) | NBST (SN) | 2024/02/21 05:01:16.1 | 39.34584, -76.58598 |
| 14 | 1.5 | 11.5 | Play MP4⬇ | Car | Car | WBST (EW) | EBLT (WN) | 2024/02/21 05:24:19.4 | 39.3459, -76.58598 |
| 15 | 1.6 | 22.5 | Play MP4⬇ | Car | Car | WBST (EW) | EBLT (WN) | 2024/02/21 05:28:31.7 | 39.3459, -76.58596 |
| 16 | 2.1 | 20.6 | Play MP4⬇ | Car | Car | WBST (EW) | EBLT (WN) | 2024/02/21 05:44:35.5 | 39.3459, -76.58606 |
| 17 | 4.7 | 20.2 | Play MP4⬇ | Car | Pedestrian | SBST (NS) | N/A | 2024/02/21 05:45:35.5 | 39.34598, -76.58614 |
| 18 | 2.8 | 21.4 | Play MP4⬇ | Car | Pedestrian | SBST (NS) | N/A | 2024/02/21 05:45:35.7 | 39.34598, -76.58614 |
| 19 | 1.8 | 11.7 | Play MP4⬇ | Car | Pedestrian | WBST (EW) | N/A | 2024/02/21 05:46:17.3 | 39.34592, -76.58584 |
| 20 | 4.8 | 18.0 | Play MP4⬇ | Car | Car | WBST (EW) | EBLT (WN) | 2024/02/21 05:48:26.2 | 39.3459, -76.58604 |
| 21 | 4.4 | 15.8 | Play MP4⬇ | Car | Car | WBST (EW) | EBLT (WN) | 2024/02/21 05:58:21.6 | 39.3459, -76.58608 |
| 22 | 4.4 | 10.4 | Play MP4⬇ | Car | Pedestrian | WBLT (ES) | N/A | 2024/02/21 05:58:29.9 | 39.34572, -76.5862 |

MORGAN STATE UNIVERSITY

# LiDAR Dashboard- Near Crash Events

# LiDAR Dashboard- Jaywalking Events

# Research Projects

❖ Investigating vehicle-pedestrian conflicts based on a new Post Encroachment Time Threshold (PET) classification at signalized intersections

❖ Investigating The Jaywalking Conflicts at a Signalized Intersection by a LiDAR Sensor Technology

# Research on Connected Vehicles (CVs)

# Research on Connected Vehicles (CVs)

# Thanks for your Attention! Question?