



**THE UNIVERSITY OF TEXAS AT AUSTIN  
CENTER FOR TRANSPORTATION RESEARCH**

**5-6005-01-P3**

**DATA COLLECTED ON TPAD IMPLEMENTATION  
PROJECTS**

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*TxDOT Project 5-6005-01: Statewide Implementation of Total Pavement  
Acceptance Device (TPAD)*

**AUGUST 2014; PUBLISHED NOVEMBER 2014**

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Performed in cooperation with the Texas Department of Transportation and the Federal Highway Administration.

## Table of Contents

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Introduction.....	1
San Marcos Airport in February 2013 .....	2
IH 10 in El Paso, TX in April 2013 .....	3
US 75 in Sherman, TX in June 2013 .....	12
IH 10 in El Paso, TX in July 2013 .....	18
IH 27 in Lubbock and Amarillo, TX in May 2014 .....	24
US 287 in Quannah, TX in May 2014 .....	34
US 287 in Childress, TX in May 2014 .....	36
SH 288 in Houston, TX in June 2014 (Data from Dr. Moon Won at Texas Tech University (Choi and Won, 2014)) .....	38
Reference .....	51

## **Introduction**

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TPAD testing was conducted by CTR personnel at the following locations during TxDOT Project 5-6005-01: *Statewide Implementation of Total Pavement Acceptance Device (TPAD)* (January 2013 through August 2014):

- (1) San Marcos Airport,
- (2) IH 10 in El Paso (two tests conducted at this site),
- (3) US 75 in Sherman,
- (4) IH 27 in Lubbock and Amarillo,
- (5) US 287 in Quanah,
- (6) US 287 in Childress, and
- (7) SH 288 in Houston.

Pertinent data are provided in Figure 1 through Figure 96.

# San Marcos Airport in February 2013

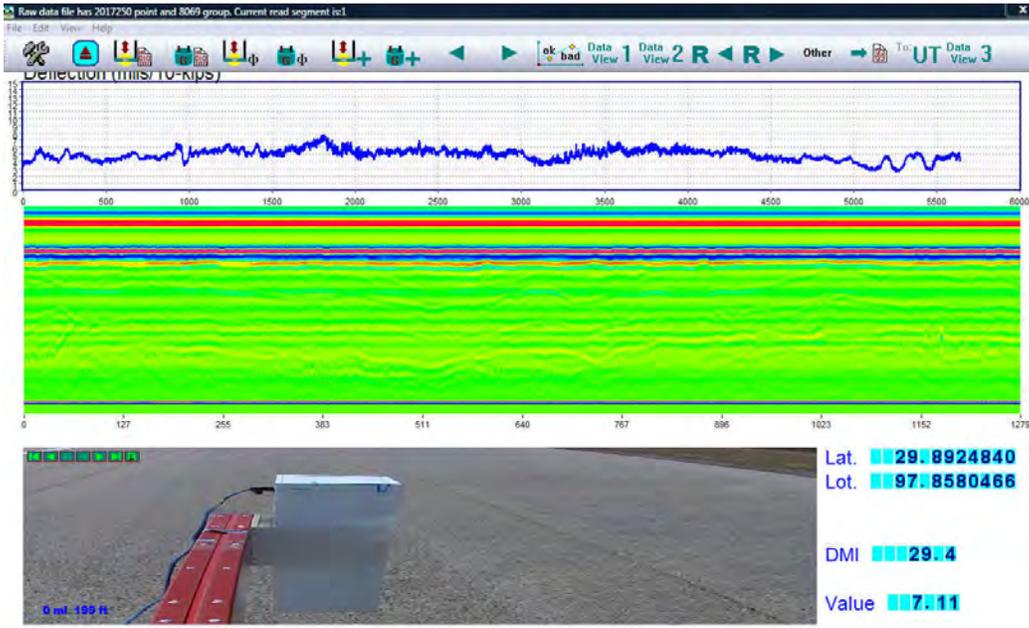


Figure 1: TPAD Data Collected on Lane 3 of Runway 8/26

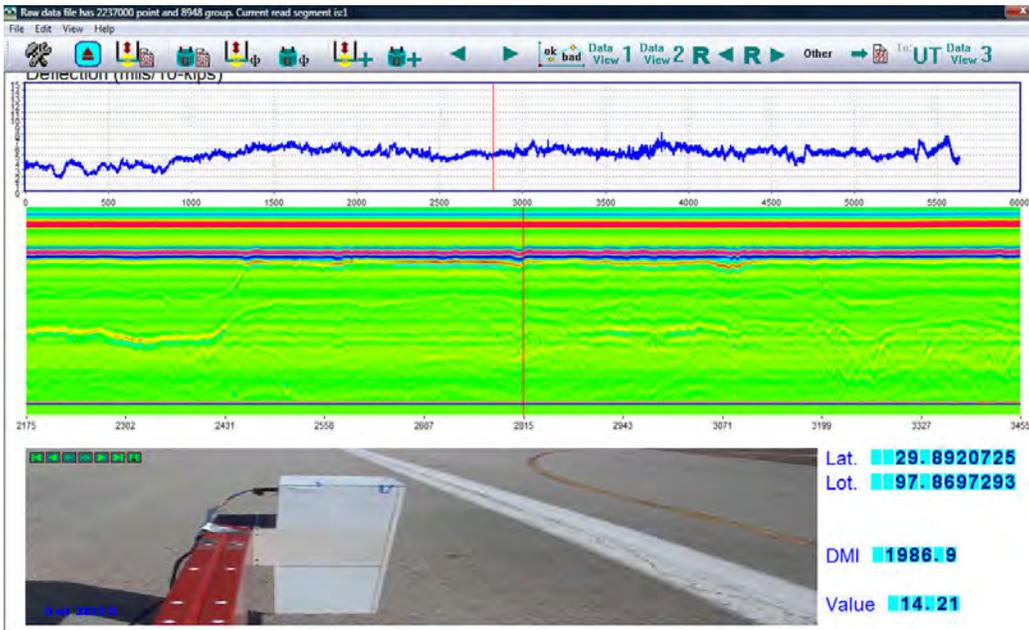


Figure 2: TPAD Data Collected on Lane 4 of Runway 8/26

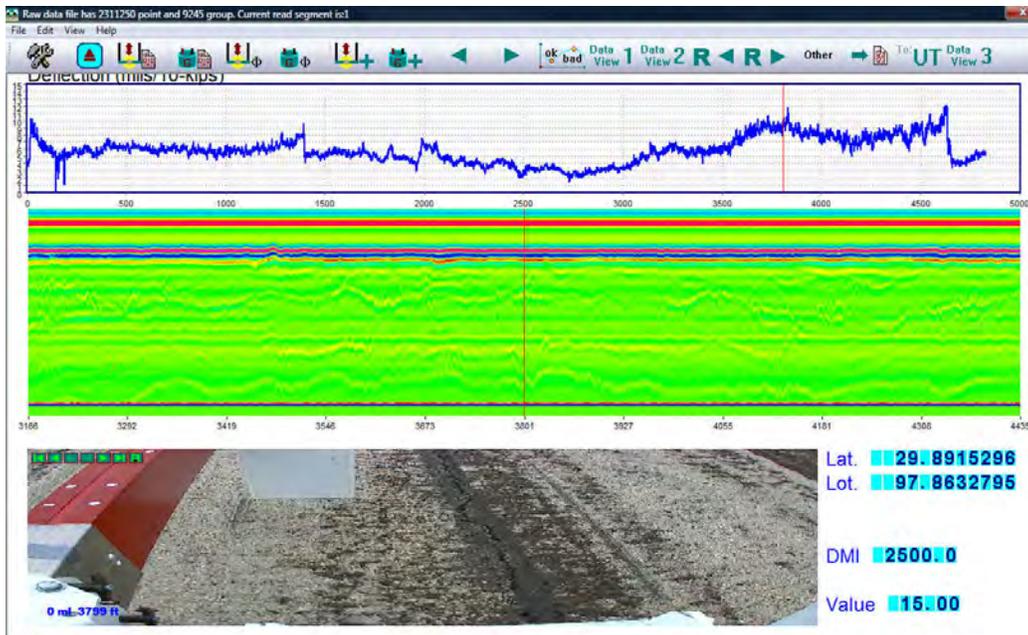


Figure 3: TPAD Data Collected on Lane 6 of Runway 13/31

## IH 10 in El Paso, TX in April 2013



Figure 4: TPAD Data Collected on Inside Lane of Eastbound from Exit 19 to 23 – Part 1

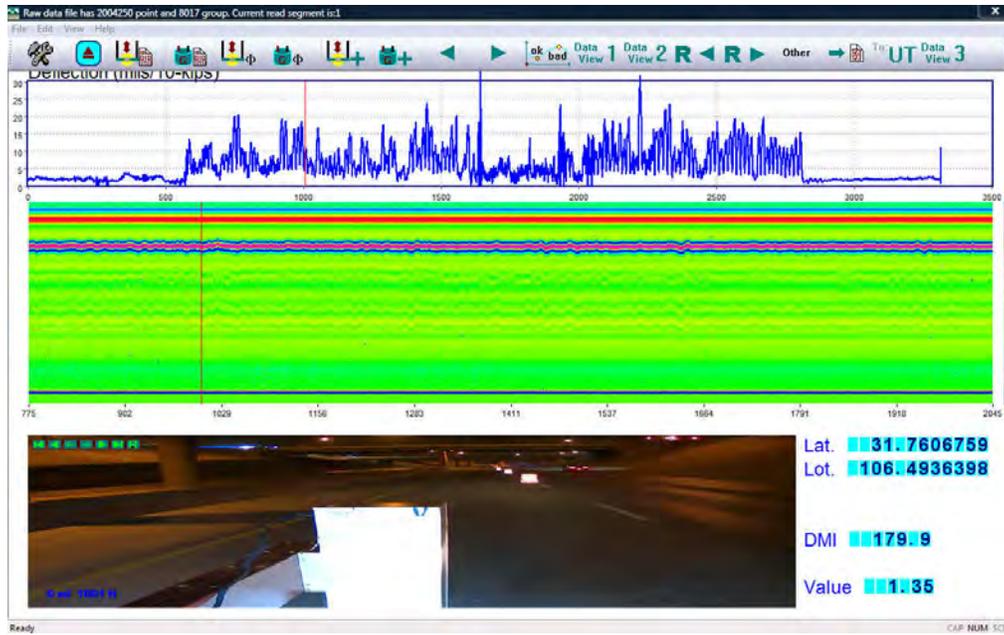


Figure 5: TPAD Data Collected on Inside Lane of Eastbound from Exit 19 to 23 – Part 2



Figure 6: TPAD Data Collected on Inside Lane of Eastbound from Exit 19 to 23 – Part 3

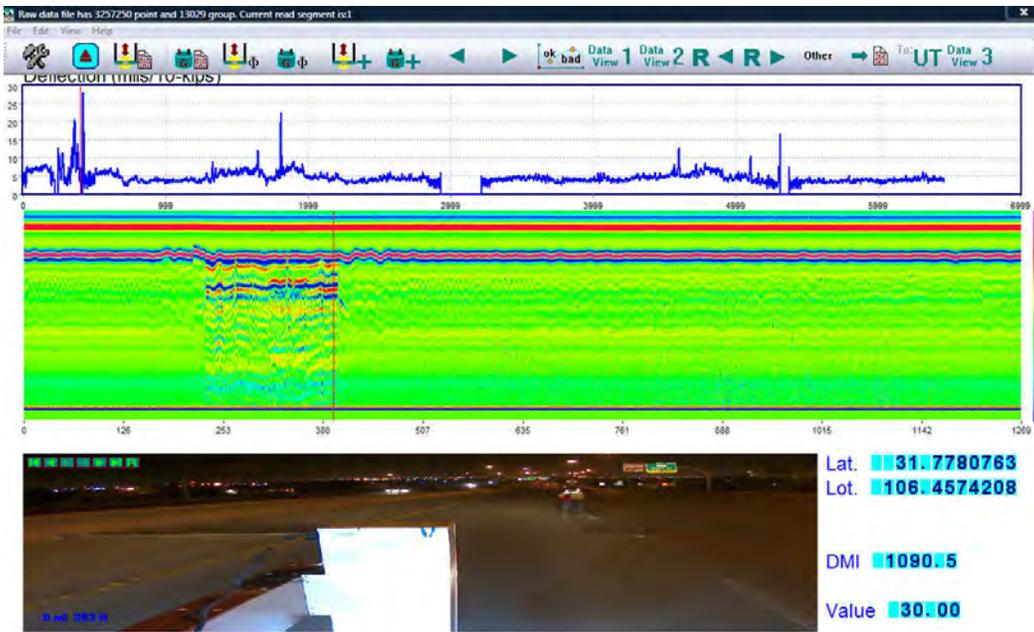


Figure 7: TPAD Data Collected on Inside Lane of Eastbound from Exit 19 to 23 – Part 4

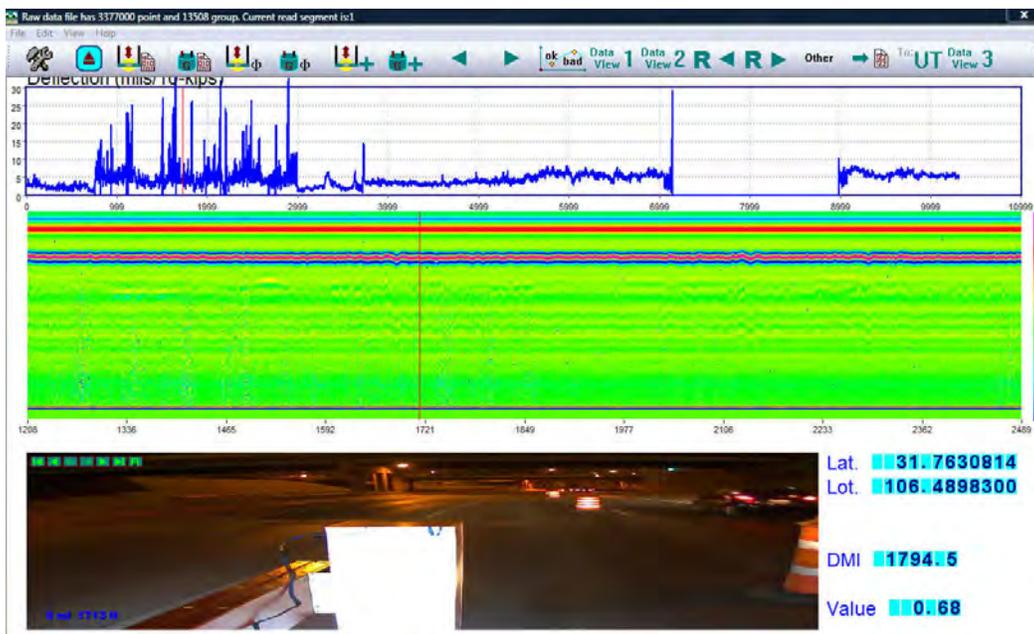


Figure 8: TPAD Data Collected on Middle Lane of Eastbound from Exit 19 to 23 – Part 1

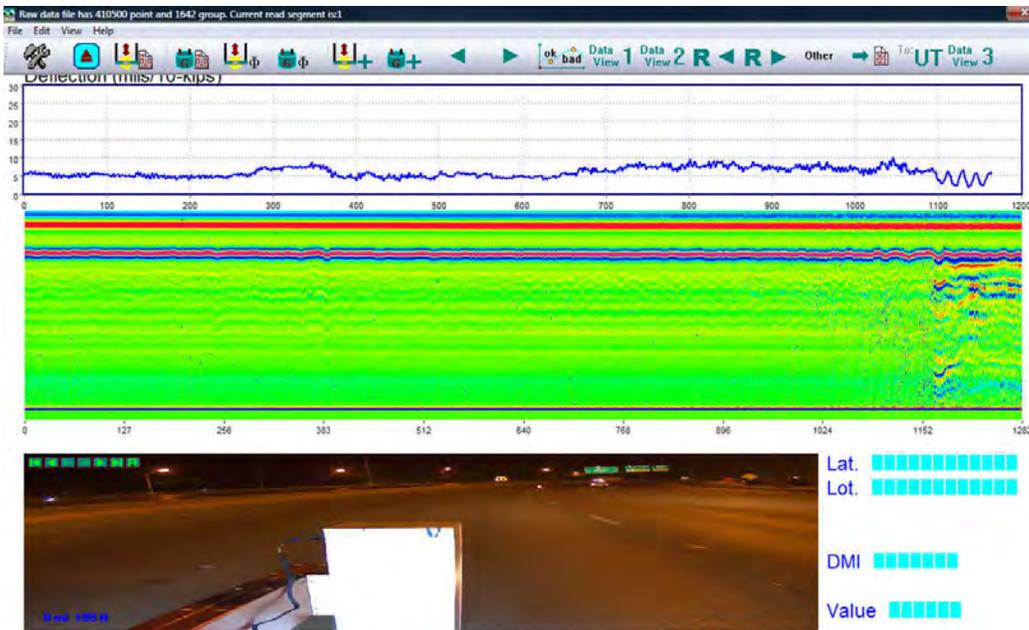


Figure 9: TPAD Data Collected on Middle Lane of Eastbound from Exit 19 to 23 – Part 2

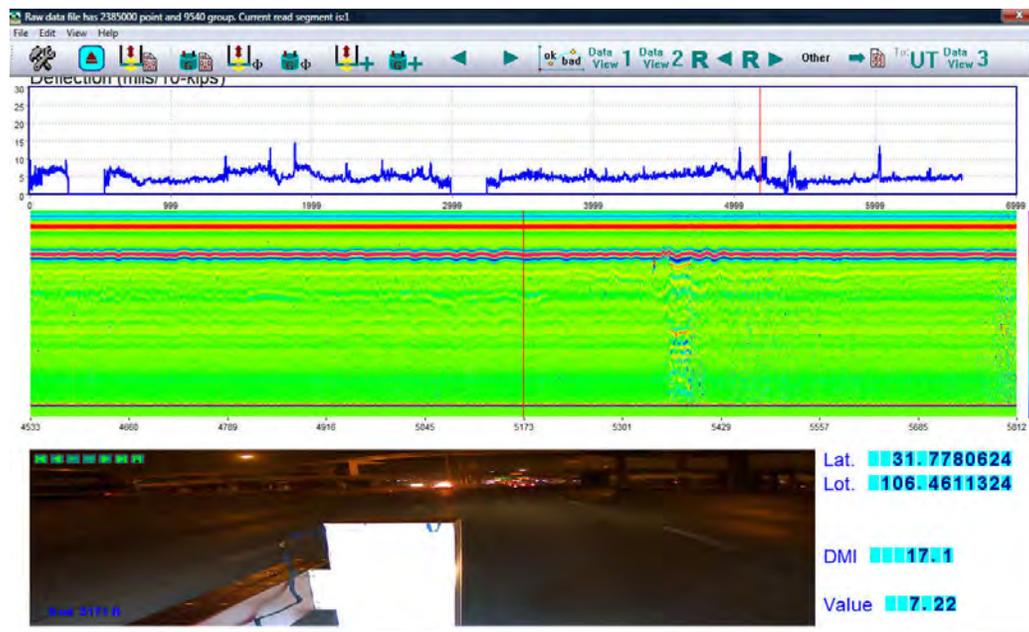


Figure 10: TPAD Data Collected on Middle Lane of Eastbound from Exit 19 to 23 – Part 3

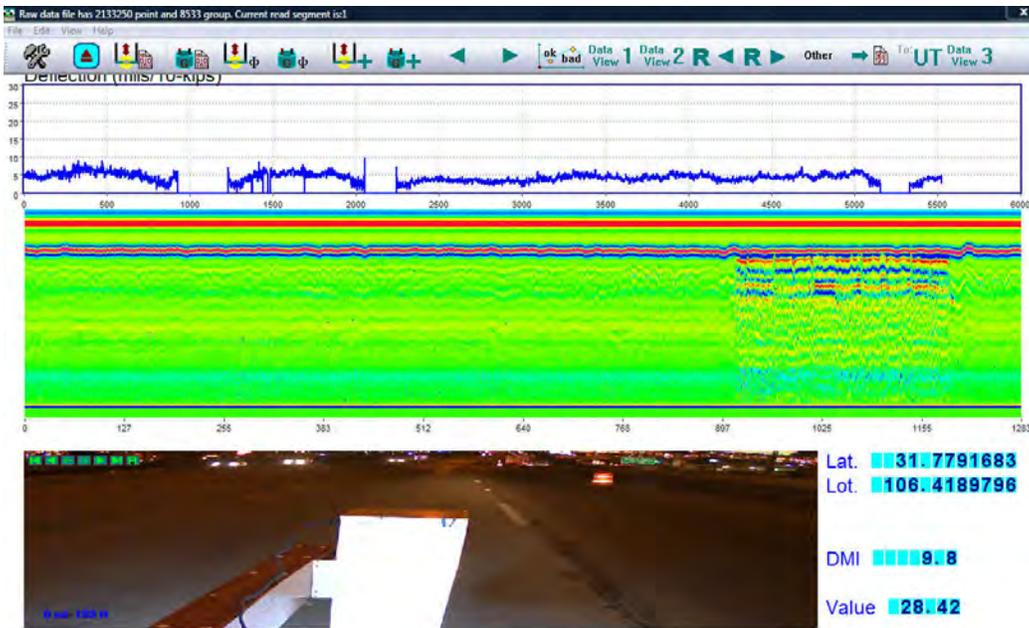


Figure 11: TPAD Data Collected on Inside Lane of Westbound from TRM 24 to 20 – Part 1

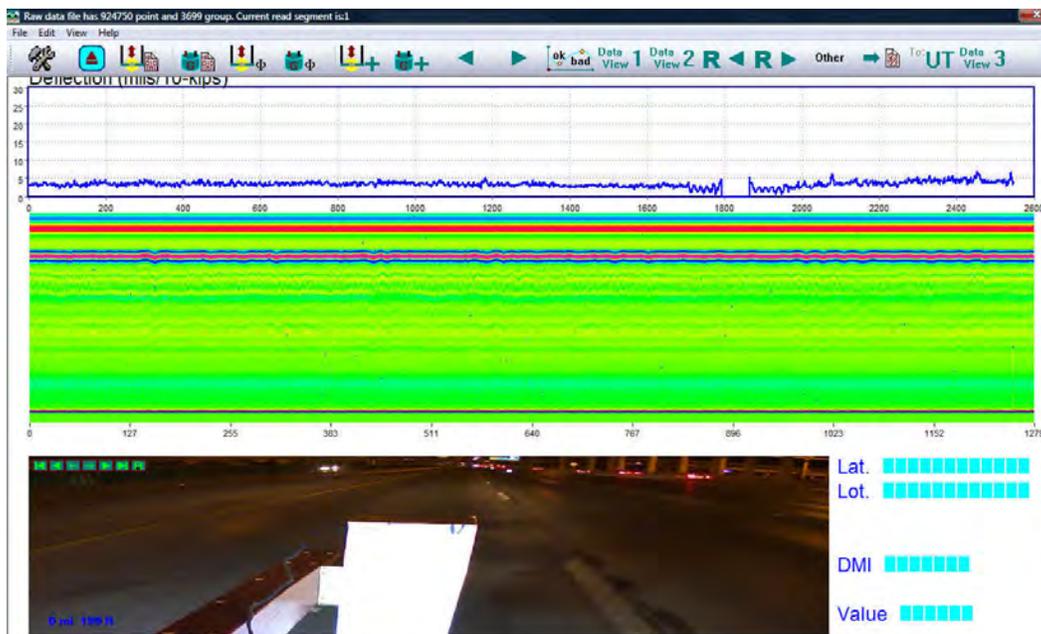


Figure 12: TPAD Data Collected on Inside Lane of Westbound from TRM 24 to 20 – Part 2

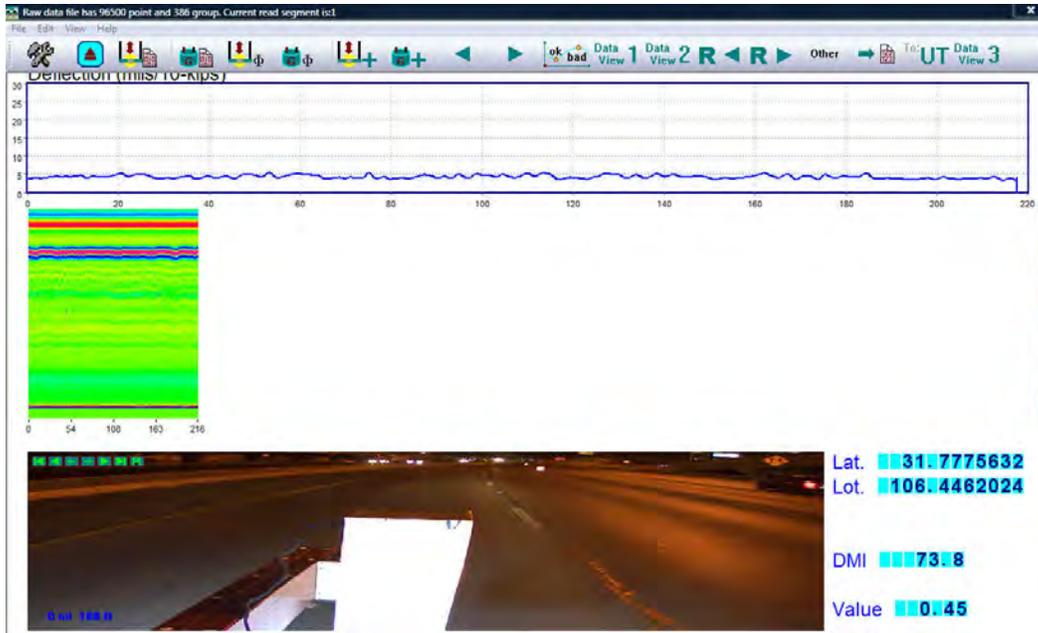


Figure 13: TPAD Data Collected on Inside Lane of Westbound from TRM 24 to 20 – Part 3

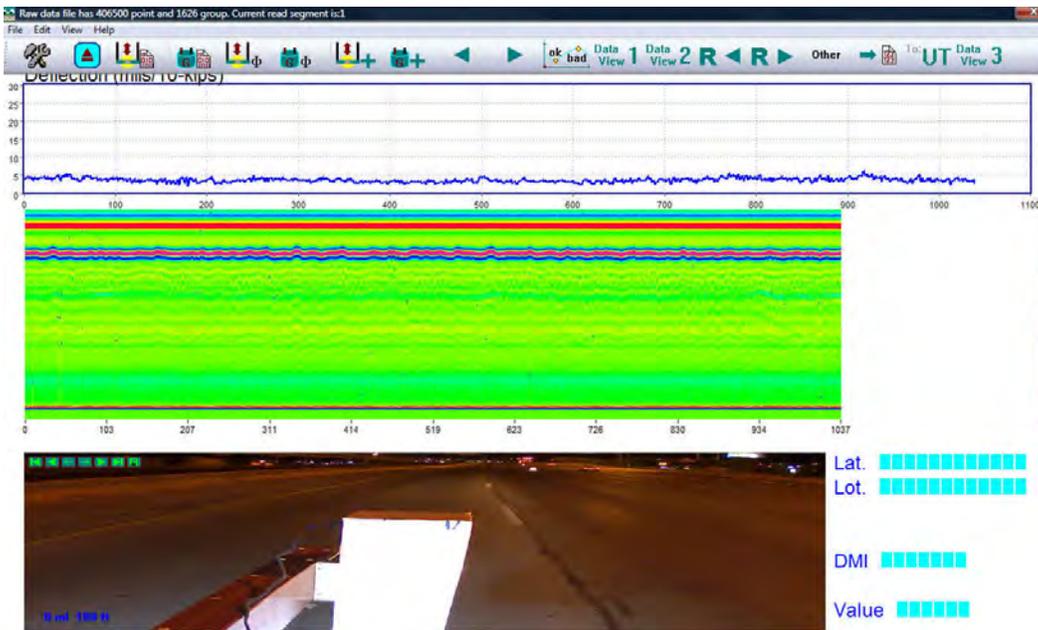


Figure 14: TPAD Data Collected on Inside Lane of Westbound from TRM 24 to 20 – Part 4





Figure 17: TPAD Data Collected on Middle Lane of Westbound from TRM 24 to 20 – Part 1

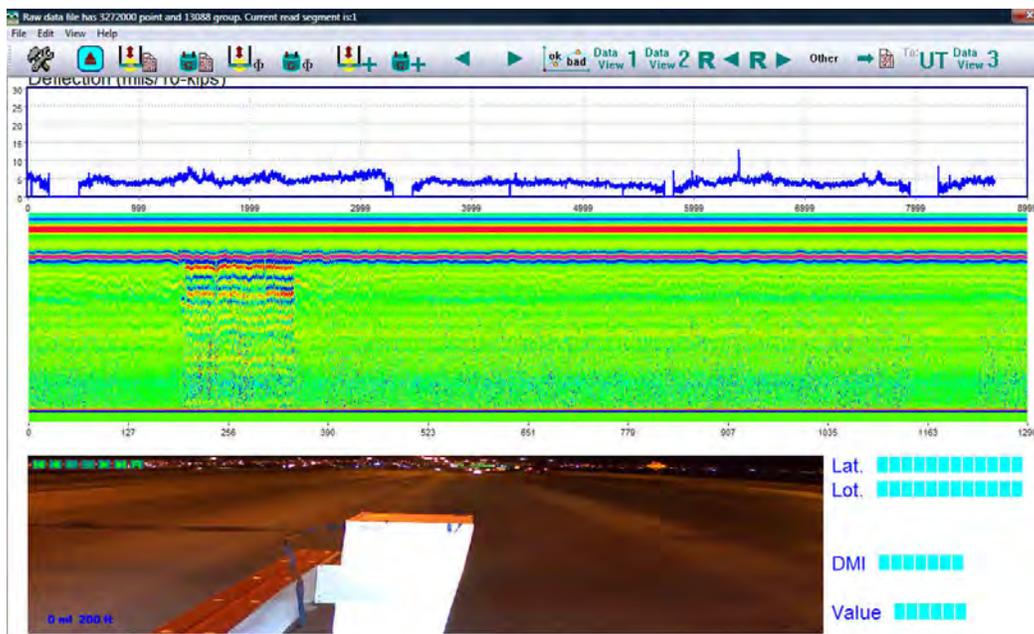


Figure 18: TPAD Data Collected on Middle Lane of Westbound from TRM 24 to 20 – Part 2



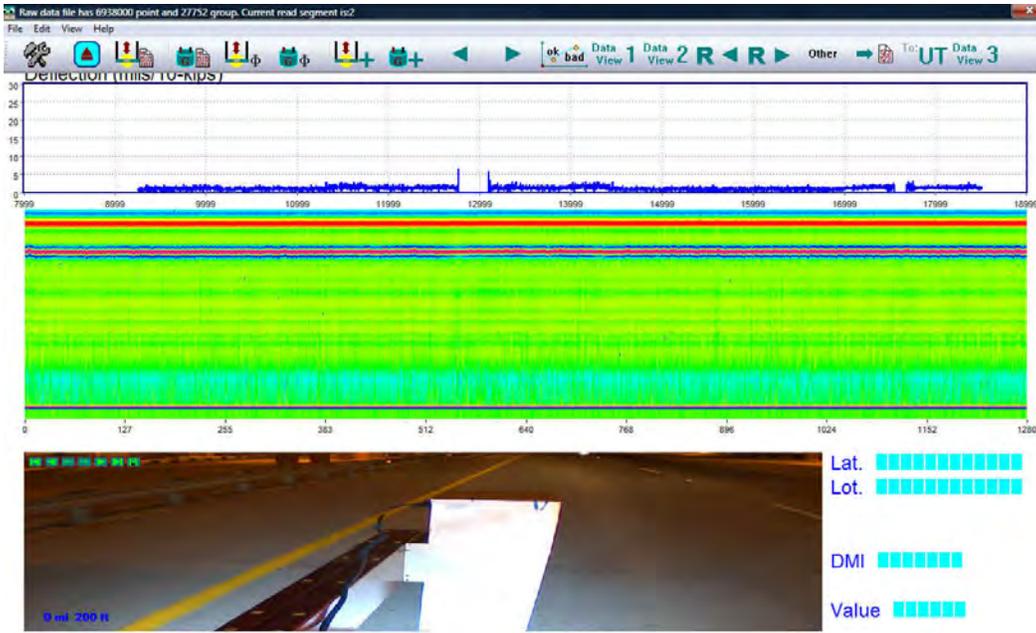


Figure 21: TPAD Data Collected on Middle Lane of Westbound from TRM 38 to 34 – Part 2

## US 75 in Sherman, TX in June 2013



Figure 22: TPAD Data Collected on Outside Lane of Southbound from RM 202 - Part 1



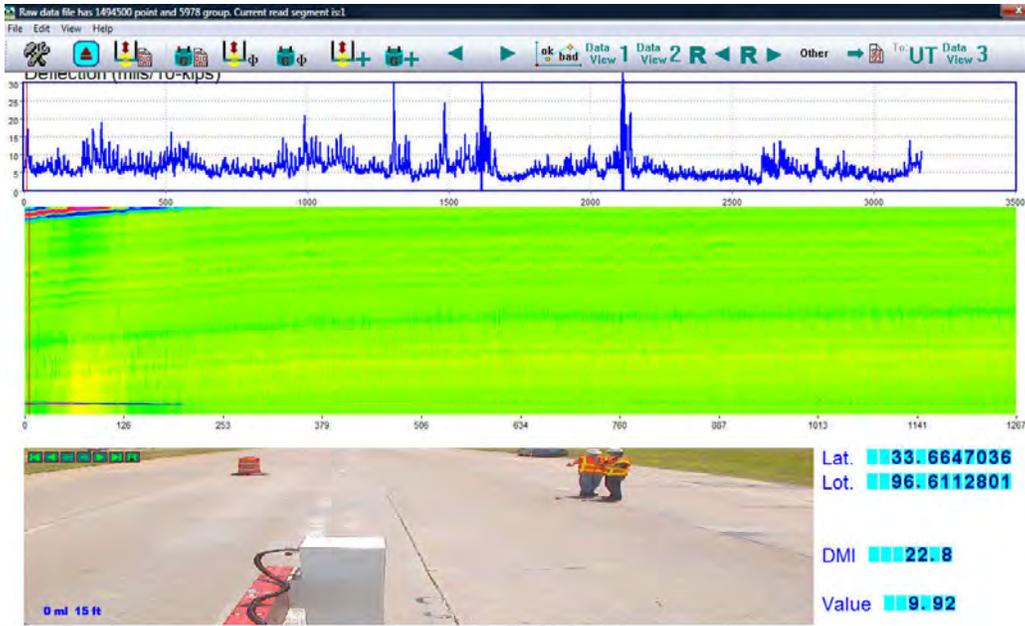


Figure 25: TPAD Data Collected on Outside Lane of Southbound from RM 202 - Part 4

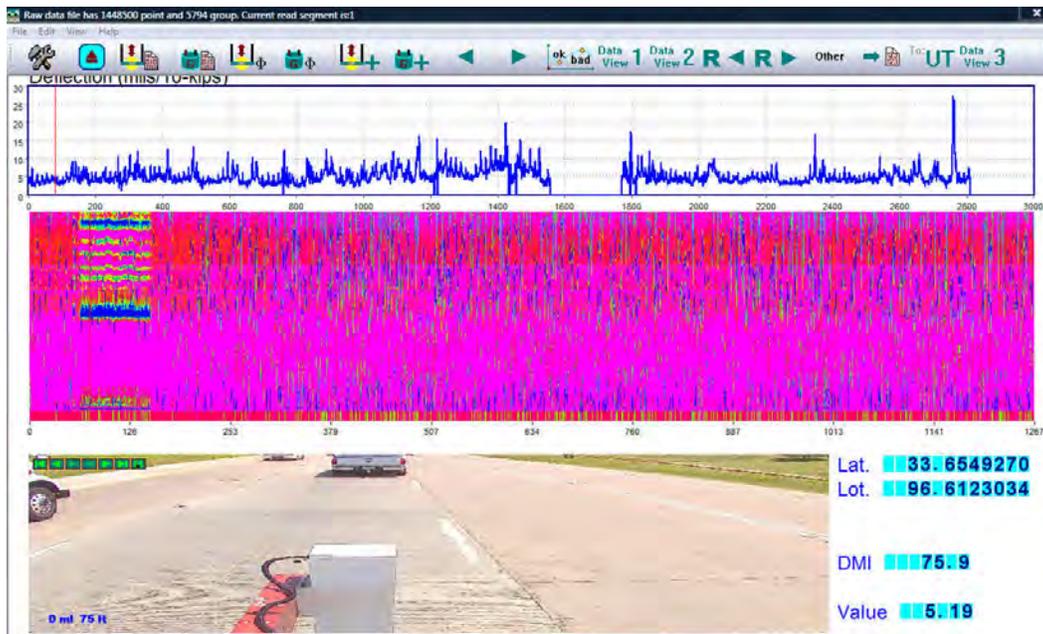


Figure 26: TPAD Data Collected on Outside Lane of Southbound from RM 202 - Part 5



Figure 27: TPAD Data Collected on Outside Lane of Northbound – Part 1



Figure 28: TPAD Data Collected on Outside Lane of Northbound – Part 2





Figure 31: TPAD Data Collected on Outside Lane of Northbound – Part 5



Figure 32: TPAD Data Collected on Outside Lane of Northbound – Part 6

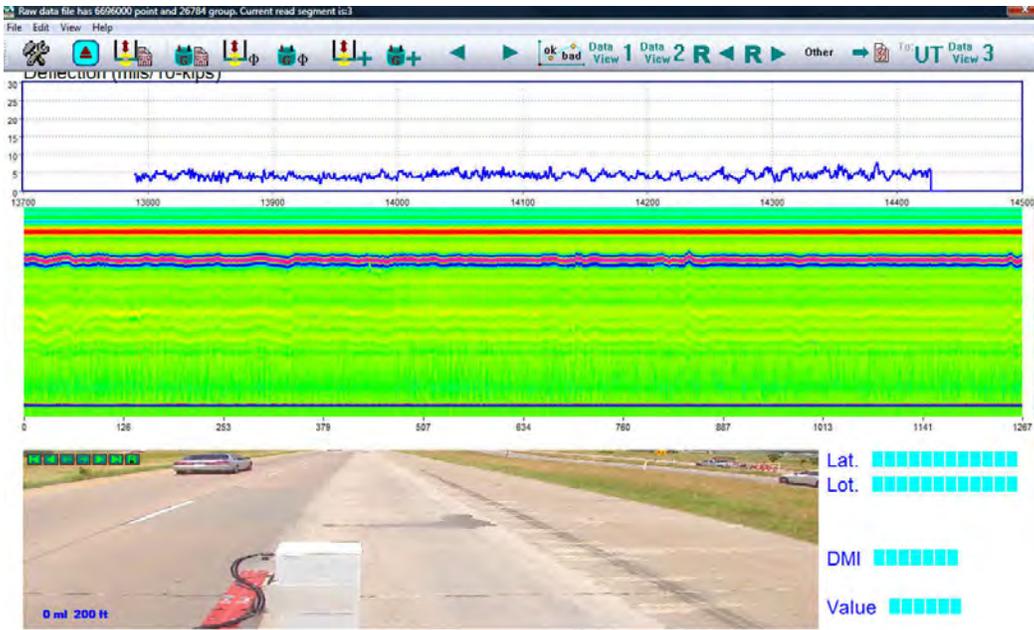


Figure 33: TPAD Data Collected on Outside Lane of Northbound – Part 7

## IH 10 in El Paso, TX in July 2013



Figure 34: TPAD Data Collected on Inside Lane of Eastbound from TRM 25 to 27 – Part 1



Figure 35: TPAD Data Collected on Inside Lane of Eastbound from TRM 25 to 27 – Part 2



Figure 36: TPAD Data Collected on Inside Lane (Lane 1) of Westbound from TRM 27 to 25.5 – Part 1

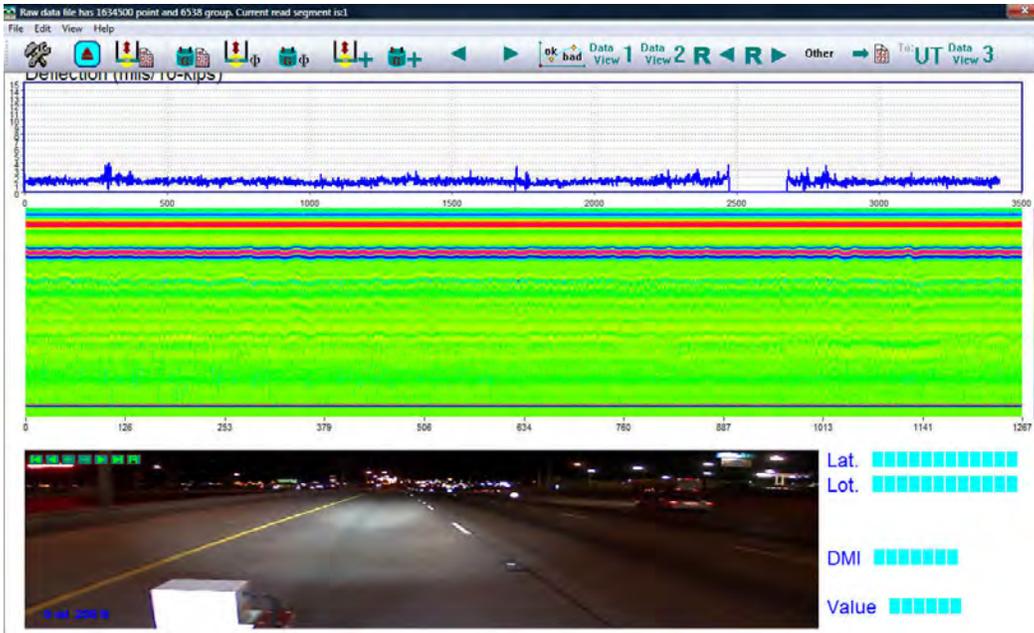


Figure 37: TPAD Data Collected on Inside Lane (Lane 1) of Westbound from TRM 27 to 25.5 – Part 2



Figure 38: TPAD Data Collected on Lane 2 of Westbound from TRM 27 to 25.5 – Part 1

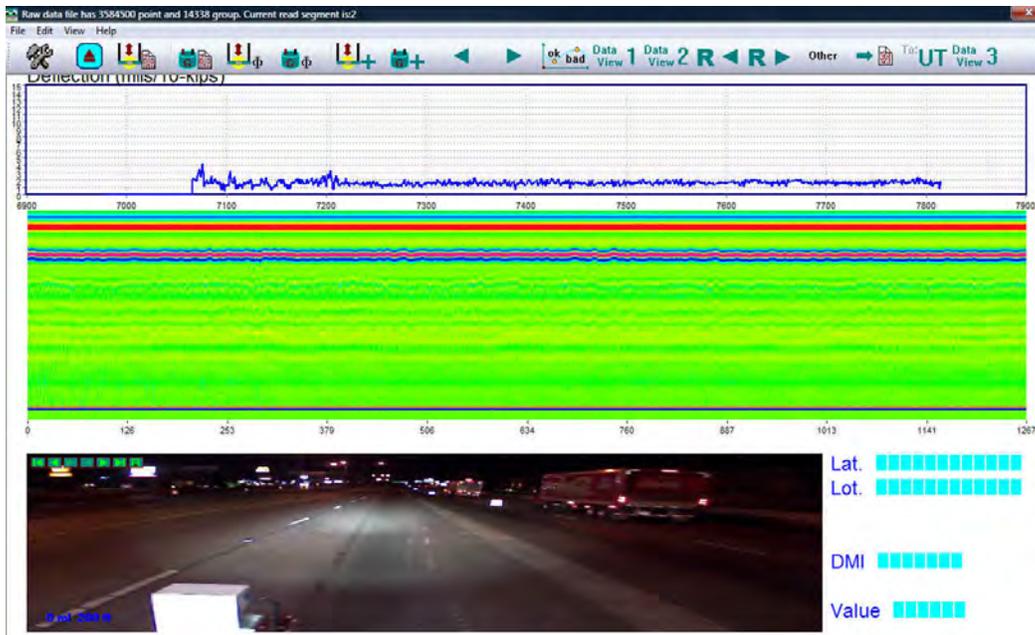


Figure 39: TPAD Data Collected on Lane 2 of Westbound from TRM 27 to 25.5 – Part 2

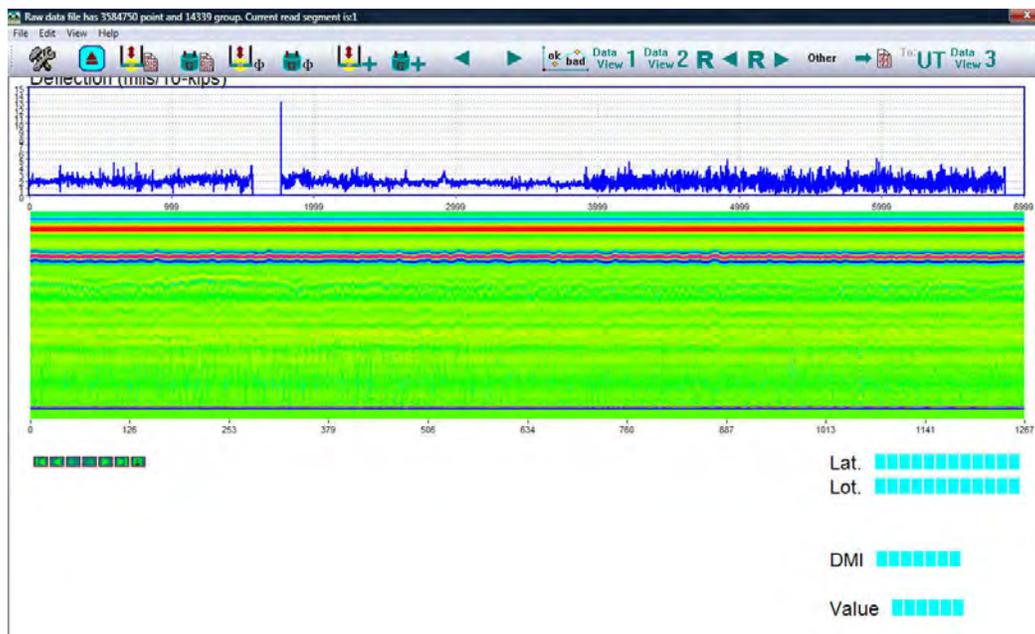


Figure 40: TPAD Data Collected on Lane 2 of Westbound from TRM 27 to 25.5 – Part 1

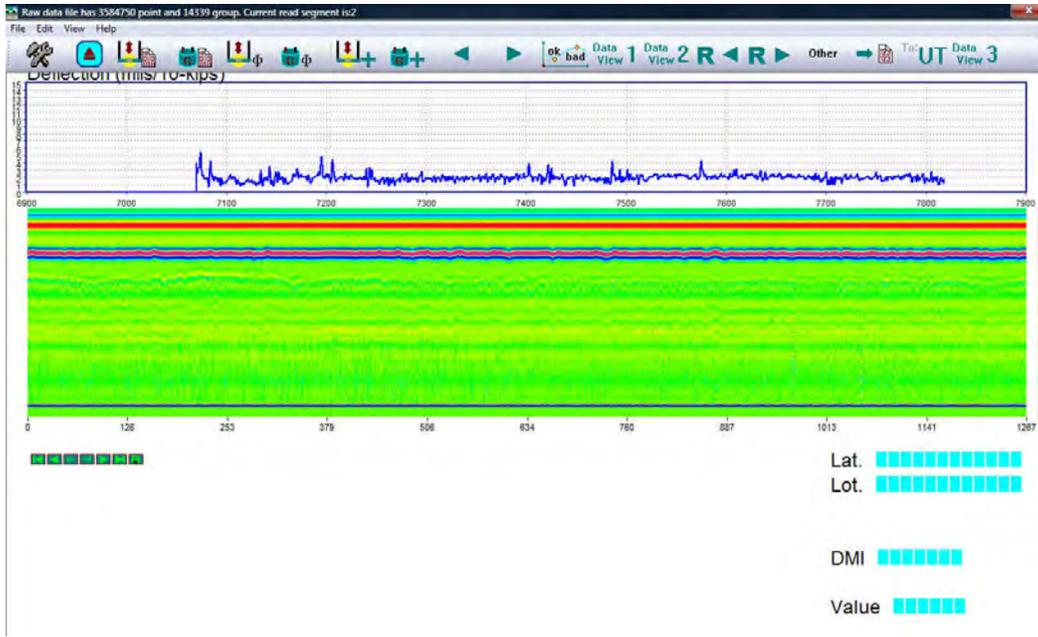


Figure 41: TPAD Data Collected on Lane 2 of Westbound from TRM 27 to 25.5 – Part 2



Figure 42: TPAD Data Collected on (Inside Lane) Lane 1 of Westbound from TRM 20 to 19



# IH 27 in Lubbock and Amarillo, TX in May 2014

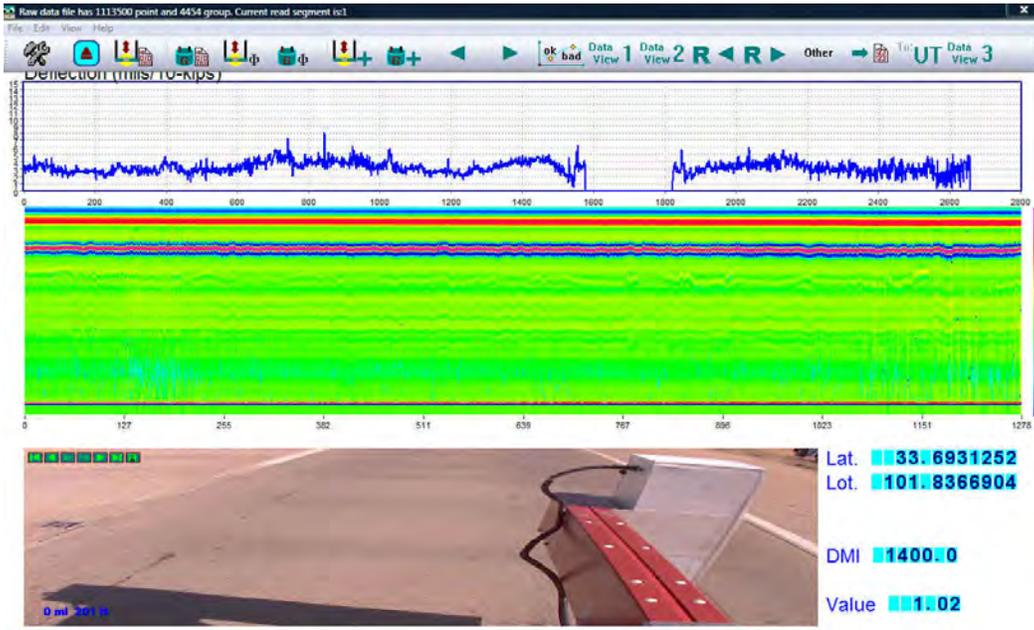


Figure 45: TPAD Data Collected on Outside of Northbound from RM 11.6 to 12.1

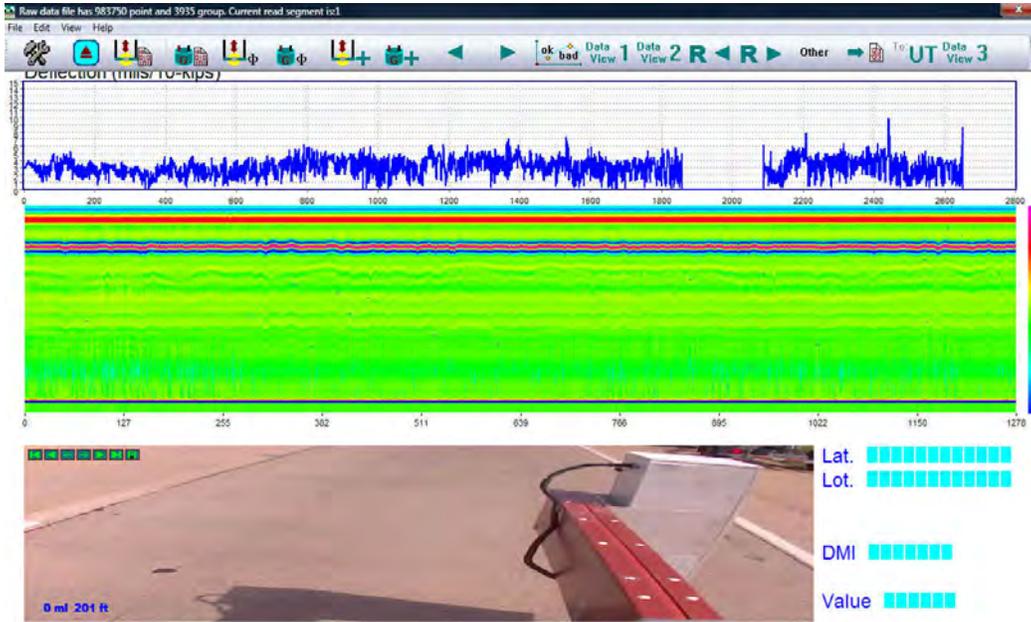


Figure 46: TPAD Data Collected on Outside of Northbound from RM 12.5 to 13.0

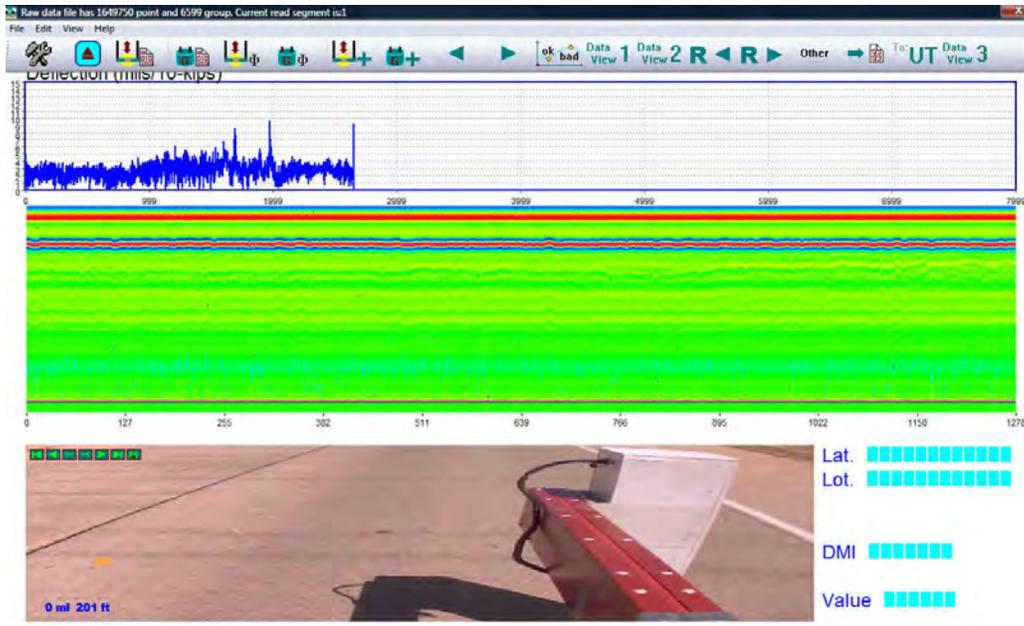


Figure 47: TPAD Data Collected on Outside of Northbound from RM 14.0 to 14.5

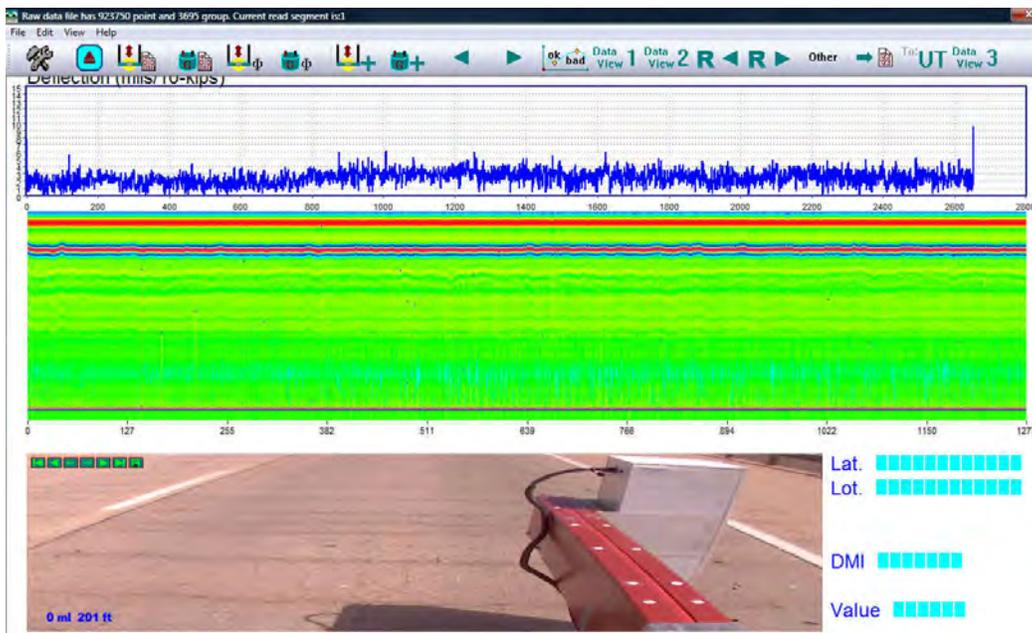


Figure 49: TPAD Data Collected on Outside of Northbound from RM 15.5 to 16.0

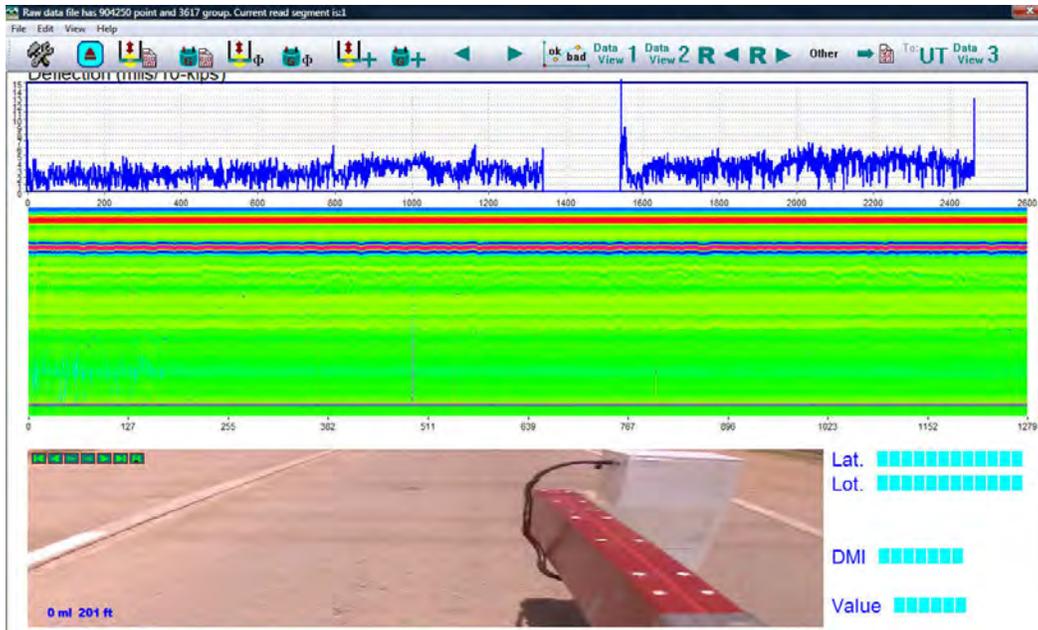


Figure 50: TPAD Data Collected on Outside of Northbound from RM 24.5 to 25.0

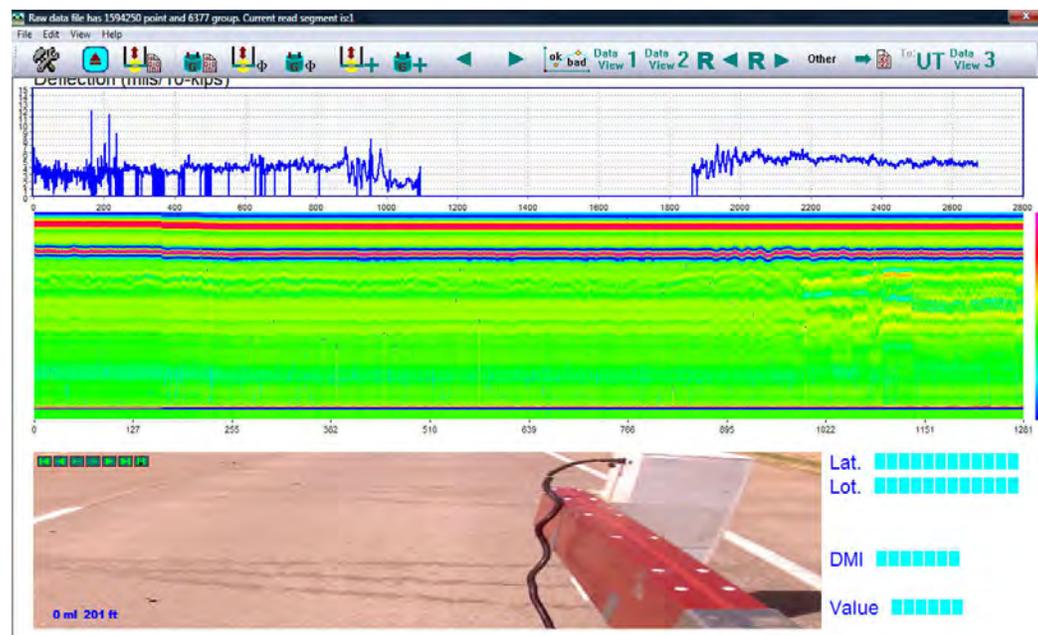


Figure 51: TPAD Data Collected on Outside of Northbound from RM 77.5 to 78.0

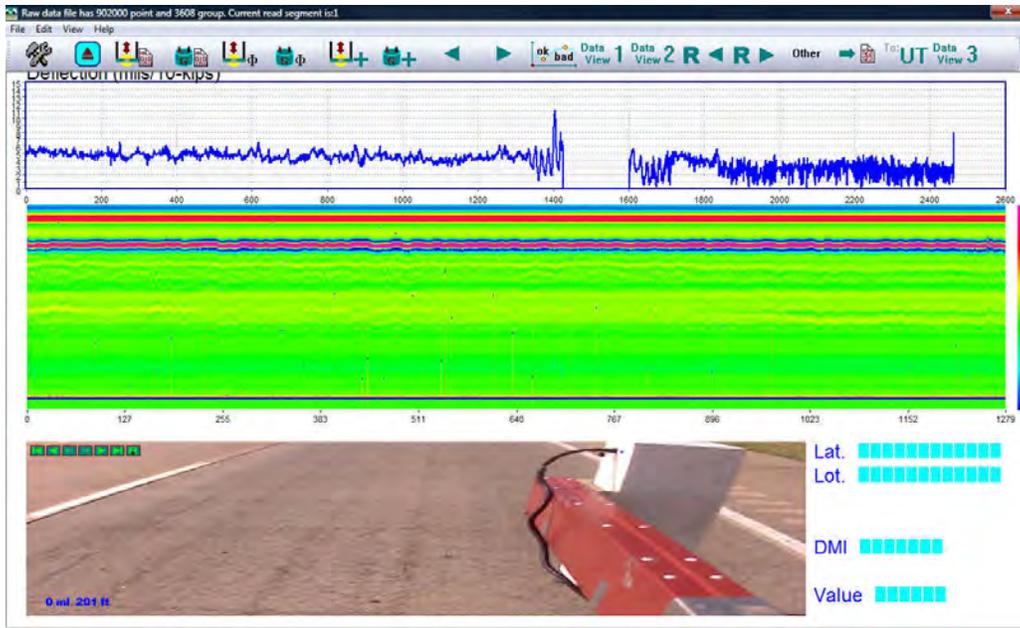


Figure 52: TPAD Data Collected on Outside of Northbound from RM 77.5 to 78.0

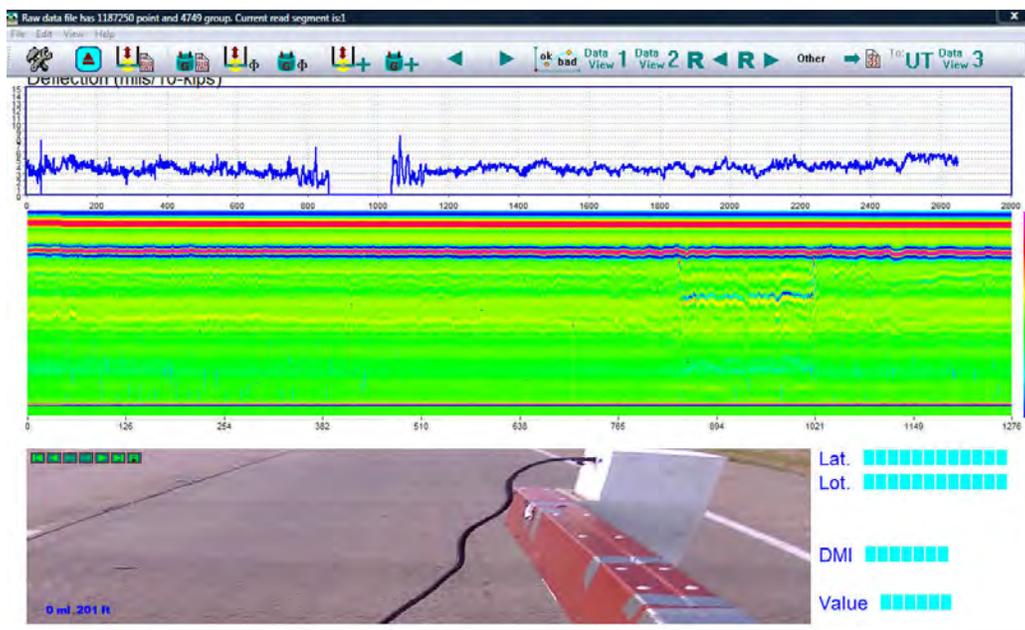


Figure 53: TPAD Data Collected on Outside of Southbound from RM 80.5 to 80.0





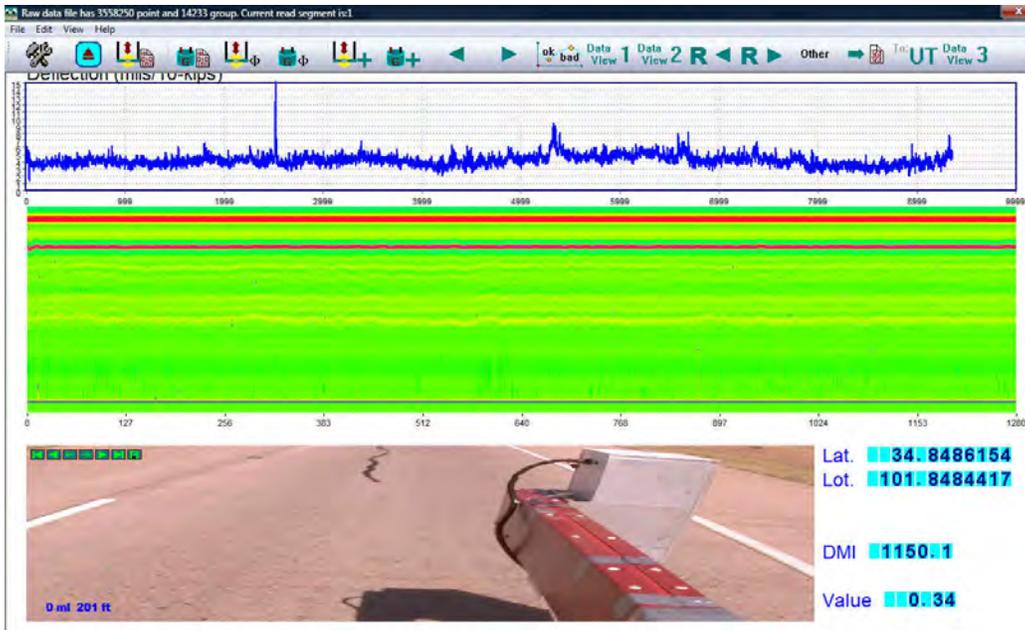


Figure 58: TPAD Data Collected on Outside of Northbound from RM 97.0 to 99.0 – Part 1

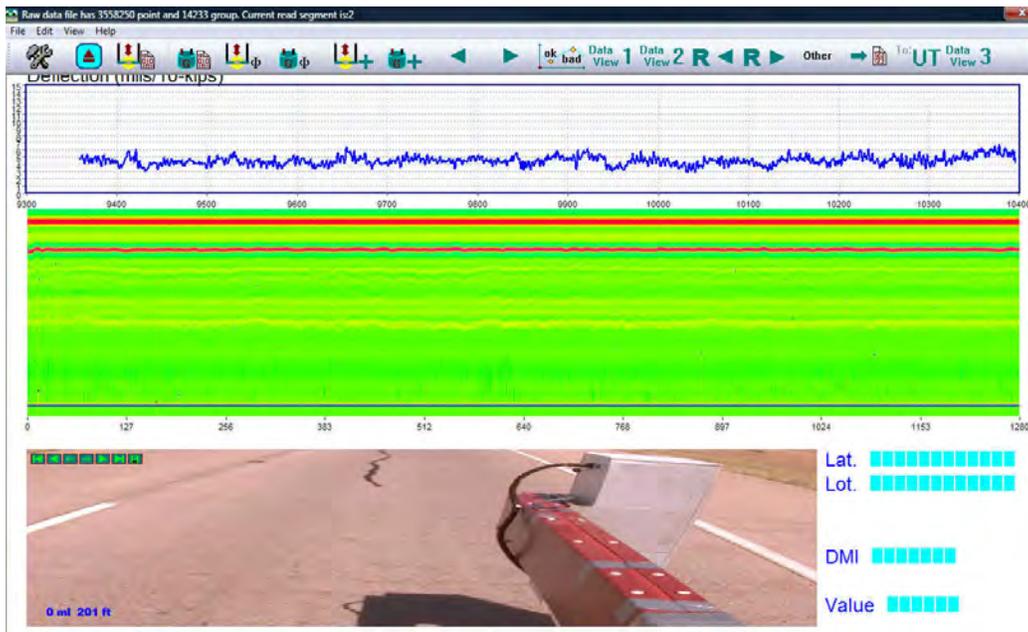
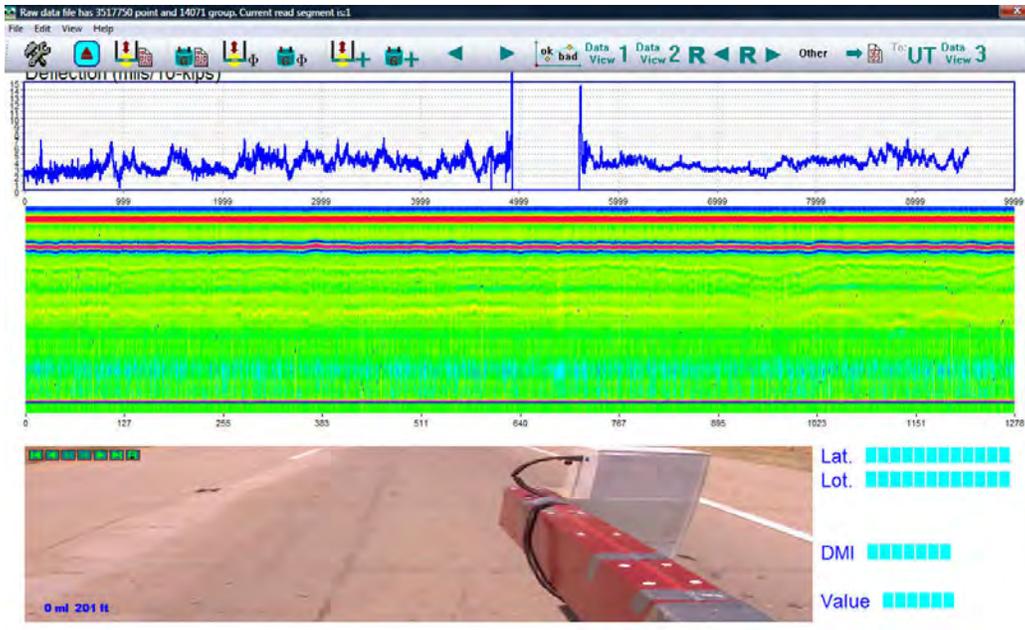
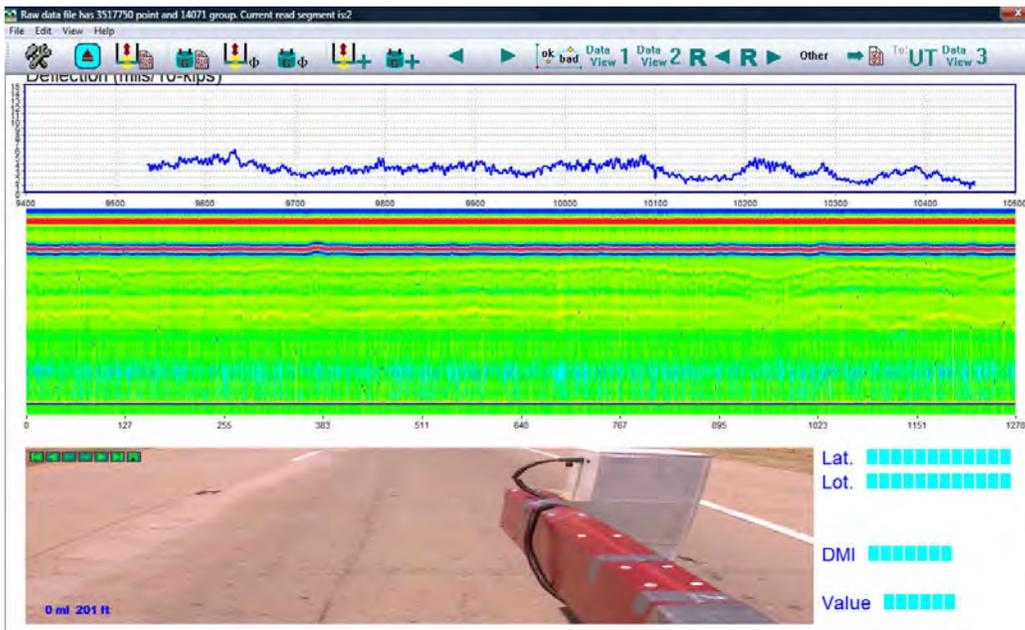


Figure 59: TPAD Data Collected on Outside of Northbound from RM 97.0 to 99.0 – Part 2



*Figure 60: TPAD Data Collected on Outside of Northbound from RM 108.0 to 110.0 – Part 1*



*Figure 60: TPAD Data Collected on Outside of Northbound from RM 108.0 to 110.0 – Part 2*

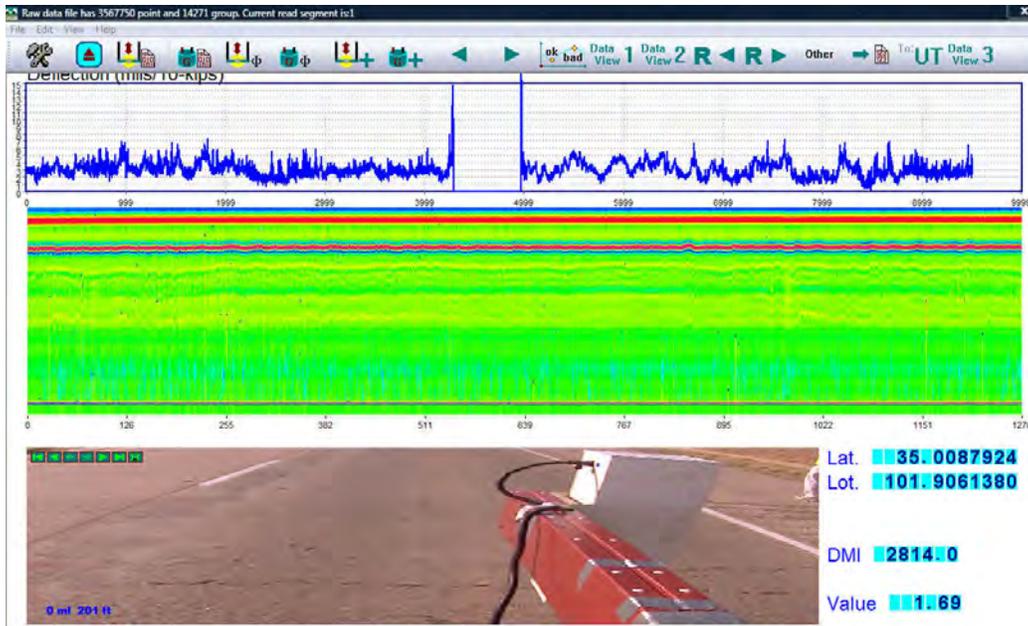


Figure 60: TPAD Data Collected on Outside of Southbound from RM 110.0 to 108.0 – Part 1



Figure 61: TPAD Data Collected on Outside of Southbound from RM 110.0 to 108.0 – Part 2

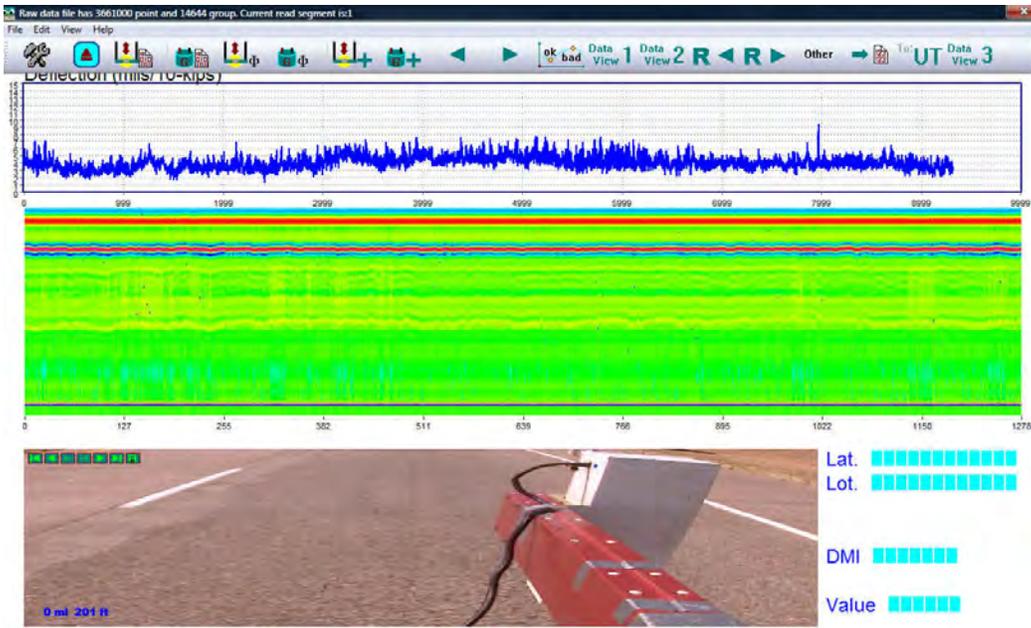


Figure 62: TPAD Data Collected on Outside of Southbound from RM 99.0 to 97.0 – Part 1

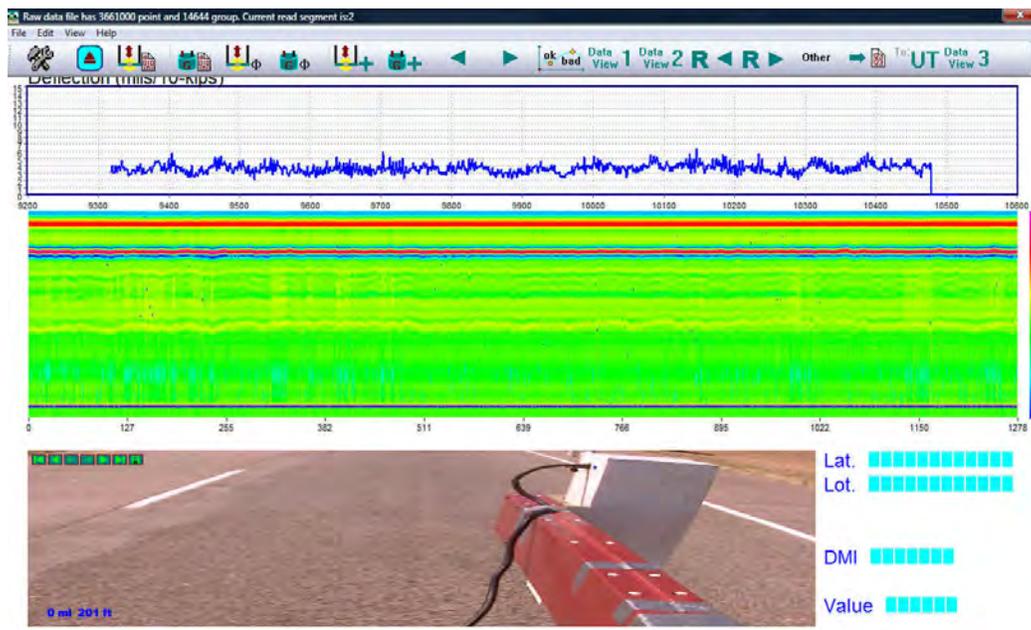


Figure 62: TPAD Data Collected on Outside of Southbound from RM 99.0 to 97.0 – Part 2

# US 287 in Quannah, TX in May 2014

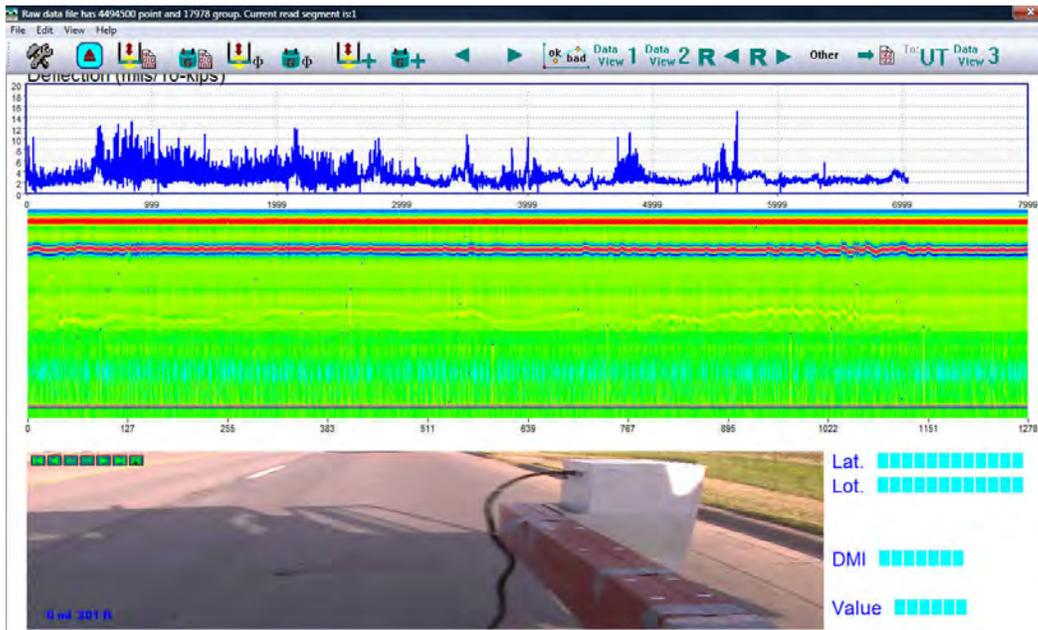


Figure 63: TPAD Data Collected on Outside of Westbound – Part 1

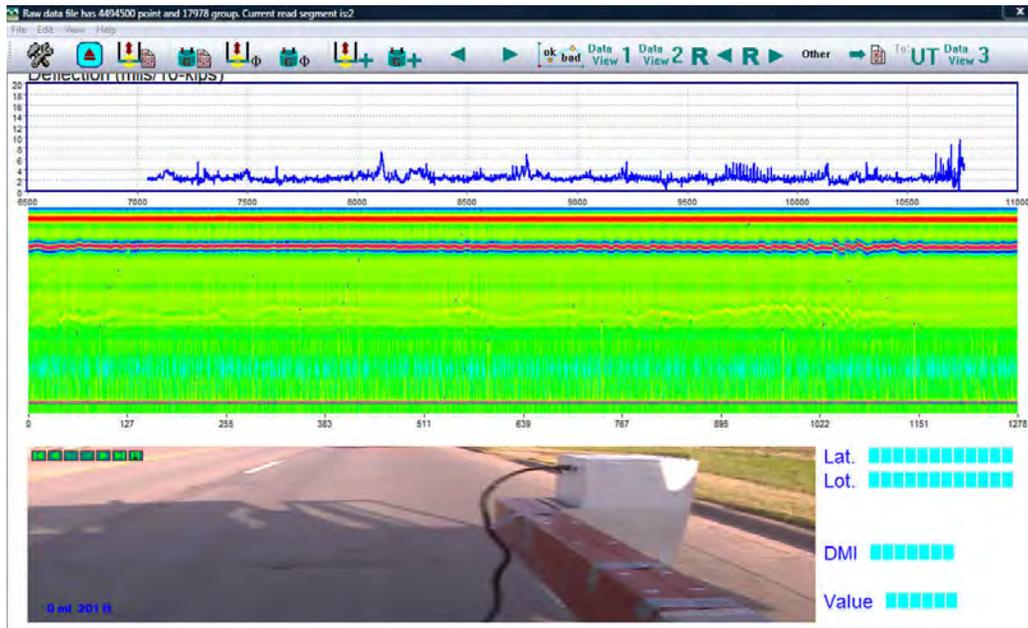


Figure 64: TPAD Data Collected on Outside of Westbound – Part 2



# US 287 in Childress, TX in May 2014

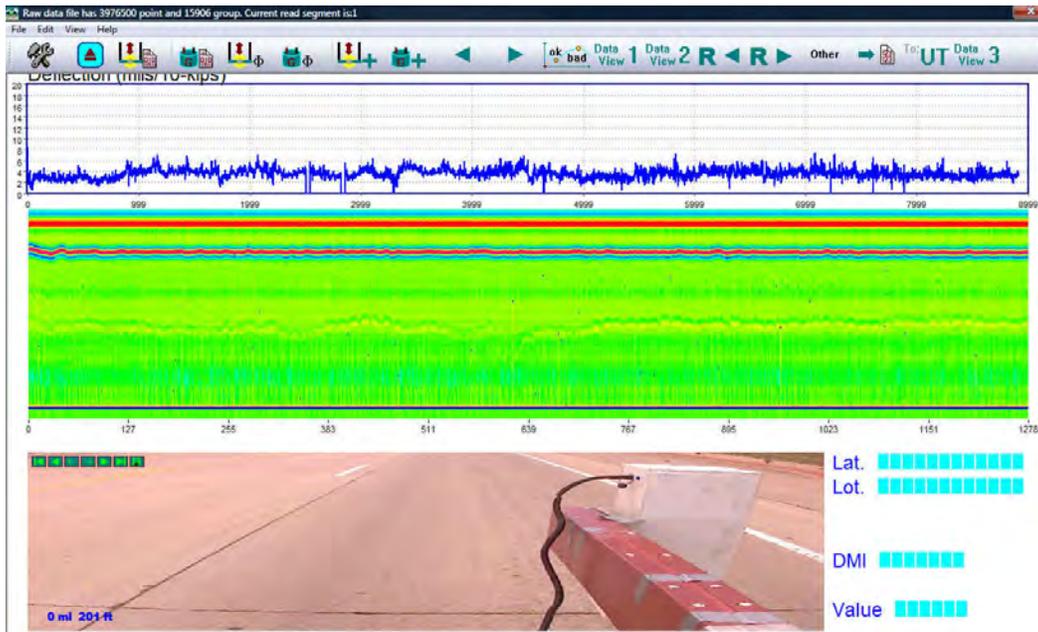


Figure 67: TPAD Data Collected on Outside of Westbound – Part 1

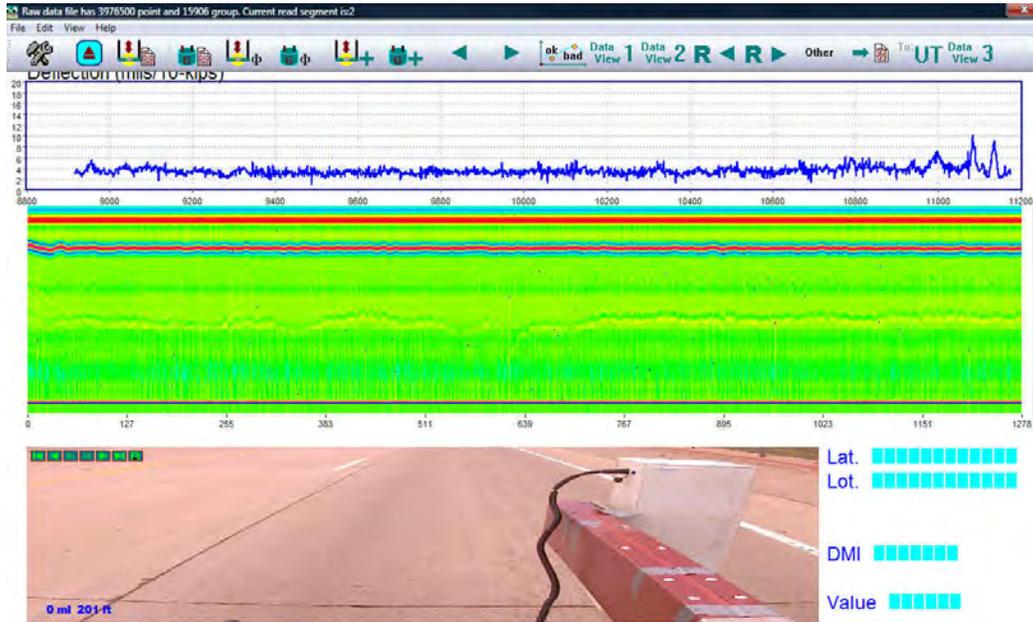


Figure 68: TPAD Data Collected on Outside of Westbound – Part 2

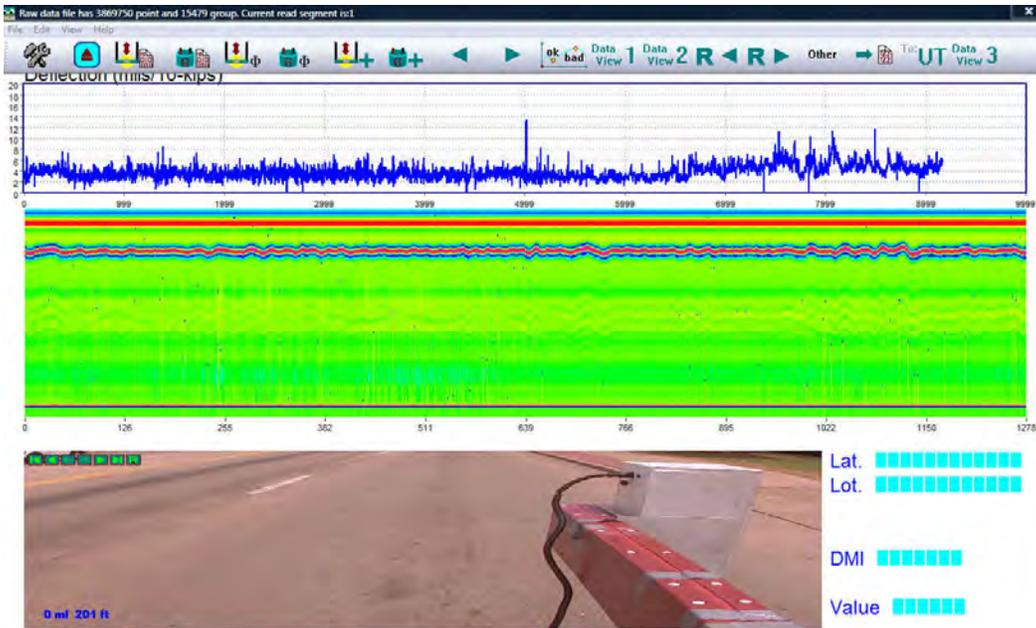


Figure 69: TPAD Data Collected on Outside of Eastbound – Part 1

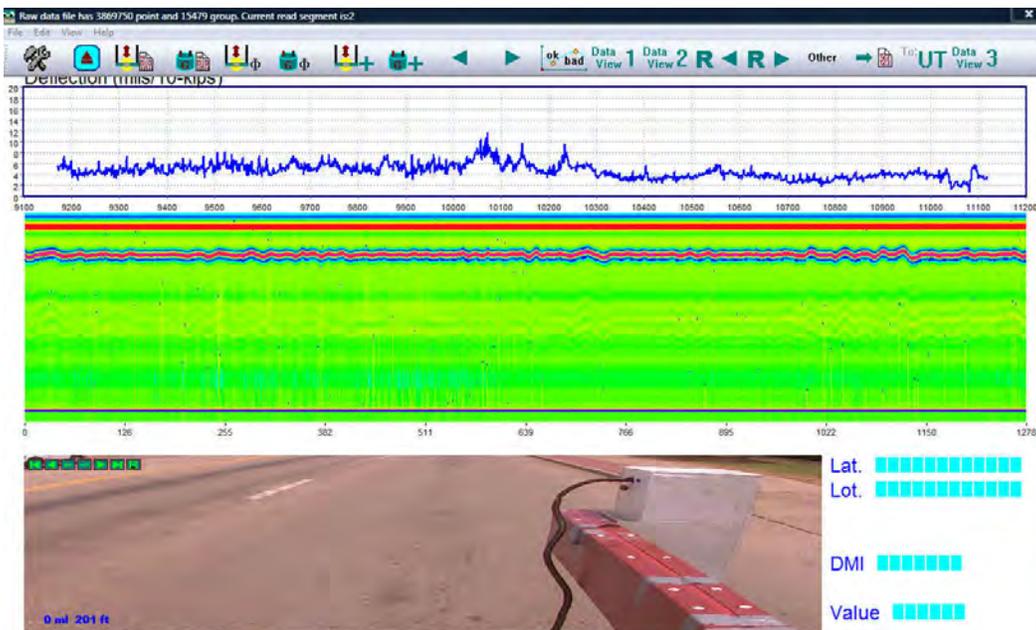


Figure 70: TPAD Data Collected on Outside of Eastbound – Part 2

SH 288 in Houston, TX in June 2014 (Data from Dr. Moon Won at Texas Tech University (Choi and Won, 2014))

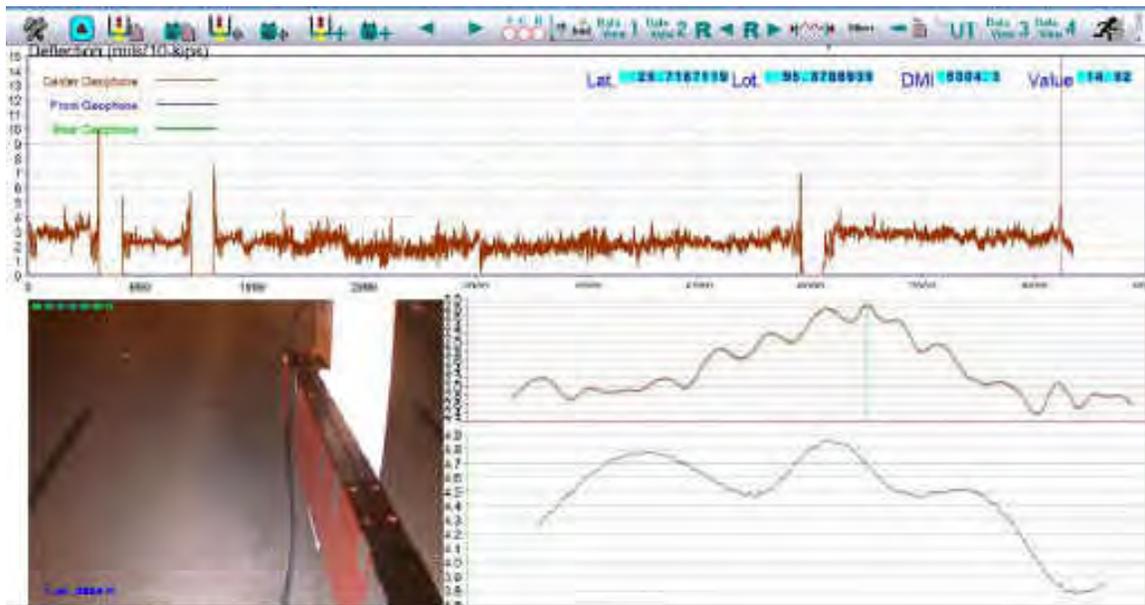


Figure 71: TPAD Data Collected on Lane 2 of Southbound – Part 1



Figure 72: TPAD Data Collected on Lane 2 of Southbound – Part 2



Figure 73: TPAD Data Collected on Lane 2 of Southbound – Part 3



Figure 74: TPAD Data Collected on Lane 2 of Southbound – Part 4



Figure 75: TPAD Data Collected on Lane 2 of Southbound – Part 5



Figure 76: TPAD Data Collected on Lane 2 of Southbound – Part 6

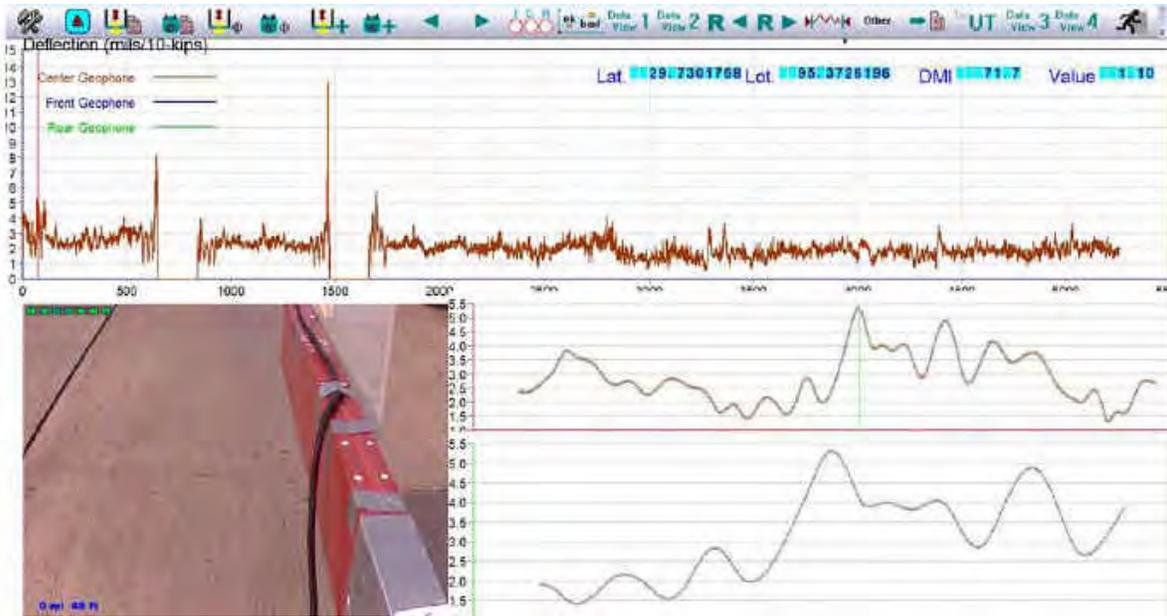


Figure 77: TPAD Data Collected on Lane 3 of Southbound – Part 1

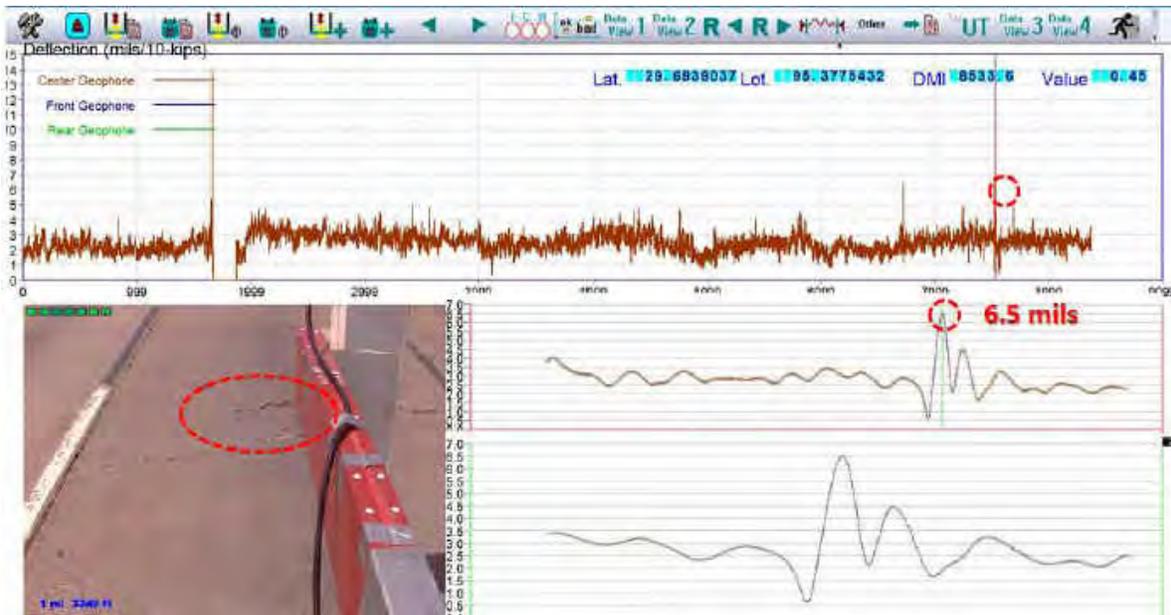


Figure 78: TPAD Data Collected on Lane 3 of Southbound – Part 2



Figure 79: TPAD Data Collected on Lane 3 of Southbound – Part 3

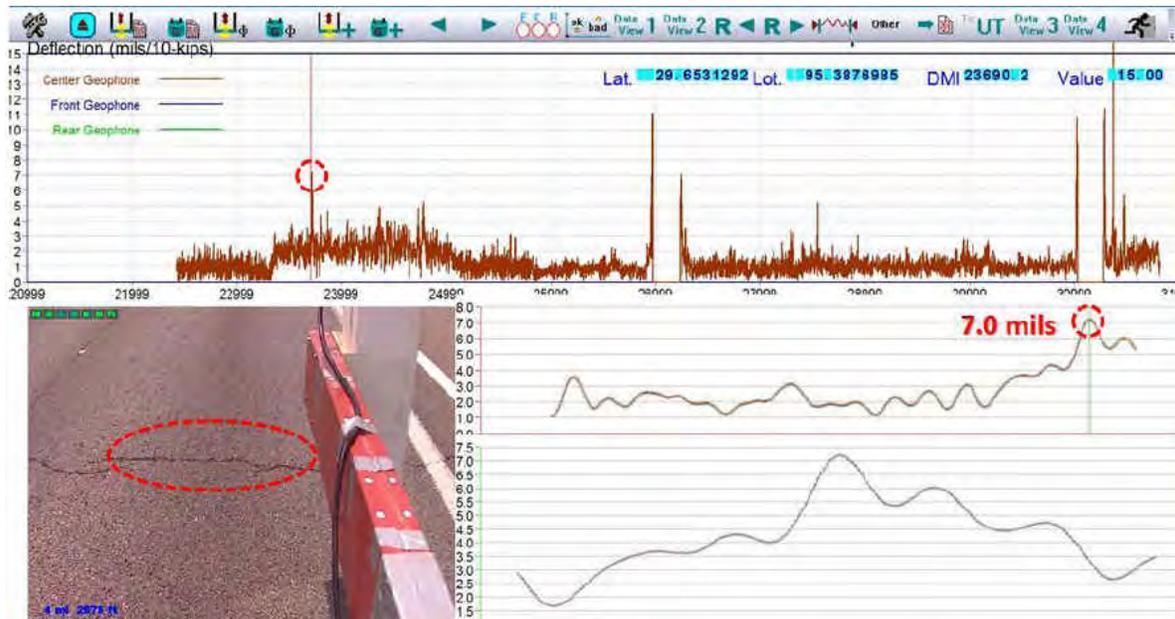


Figure 80: TPAD Data Collected on Lane 3 of Southbound – Part 4



Figure 81: TPAD Data Collected on Lane 3 of Southbound – Part 5

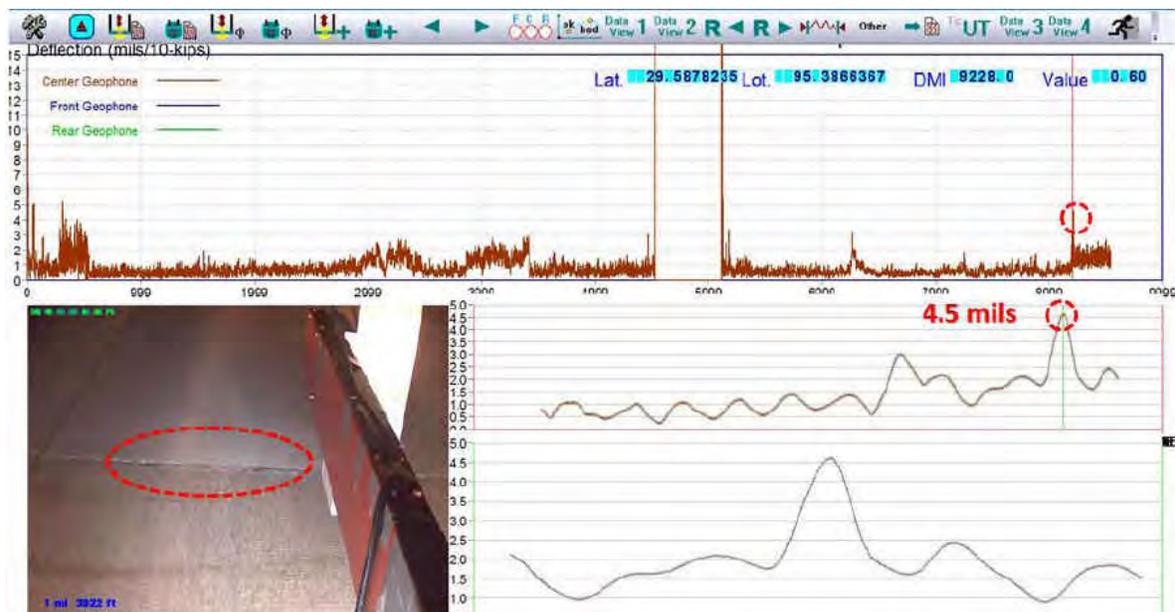


Figure 82: TPAD Data Collected on Lane 3 of Southbound – Part 6



Figure 83: TPAD Data Collected on Lane 3 of Southbound – Part 7

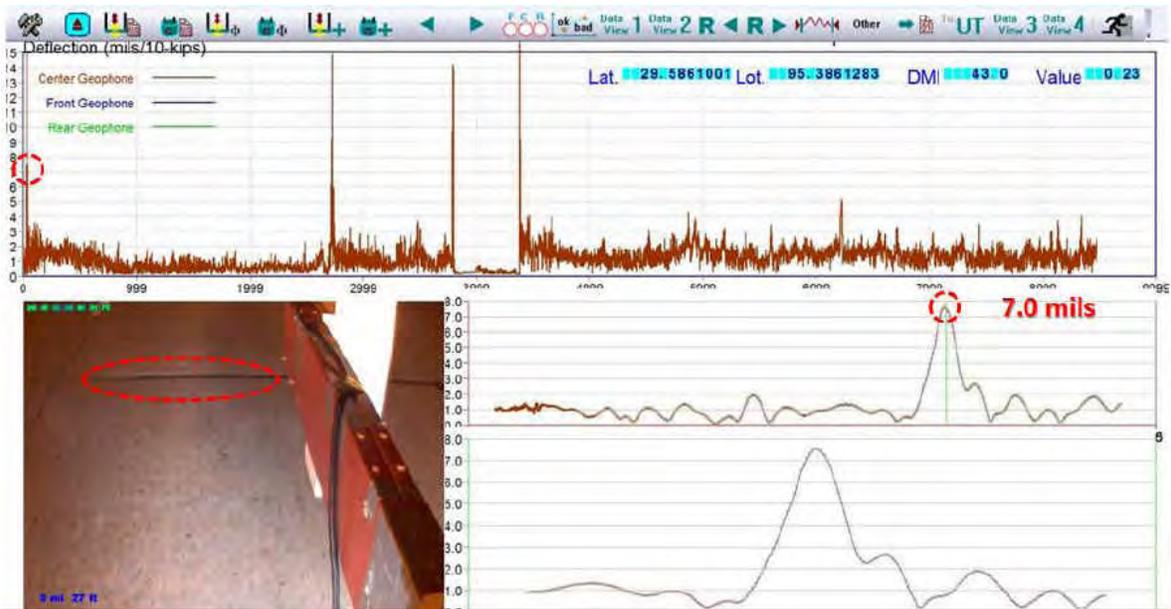


Figure 84: TPAD Data Collected on Lane 2 of Northbound – Part 1

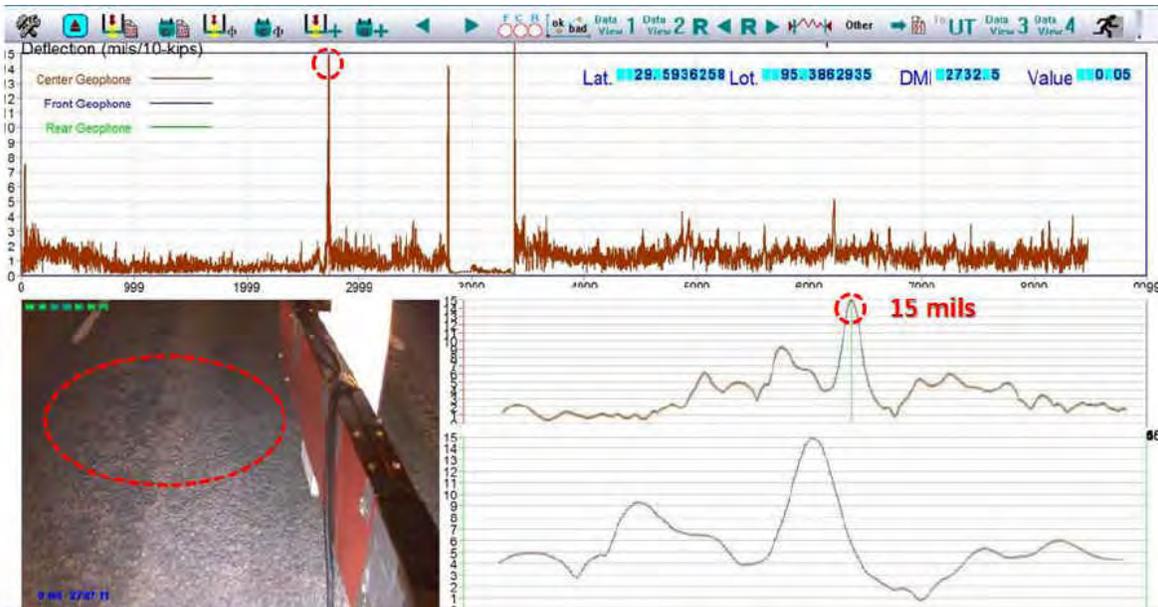


Figure 85: TPAD Data Collected on Lane 2 of Northbound – Part 2



Figure 86: TPAD Data Collected on Lane 2 of Northbound – Part 3

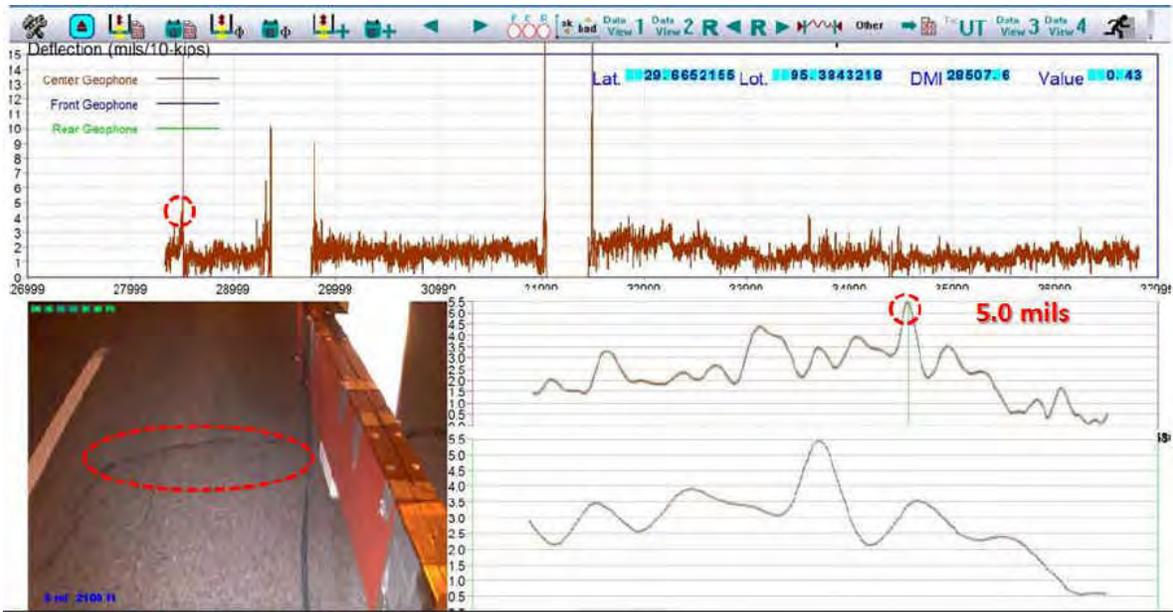


Figure 87: TPAD Data Collected on Lane 2 of Northbound – Part 4

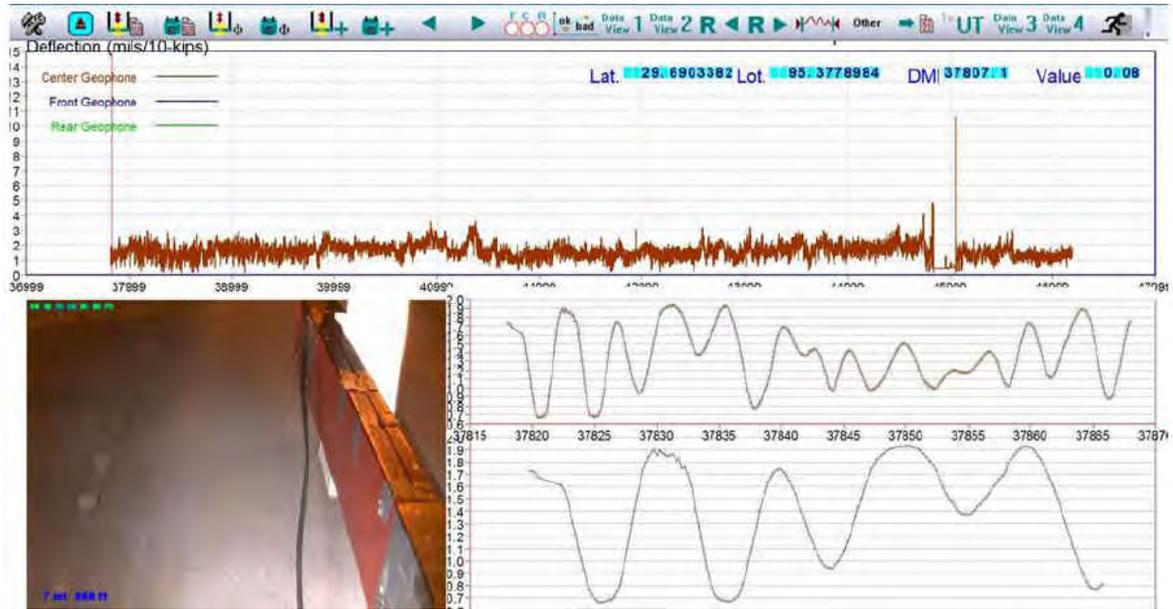


Figure 88: TPAD Data Collected on Lane 2 of Northbound – Part 5

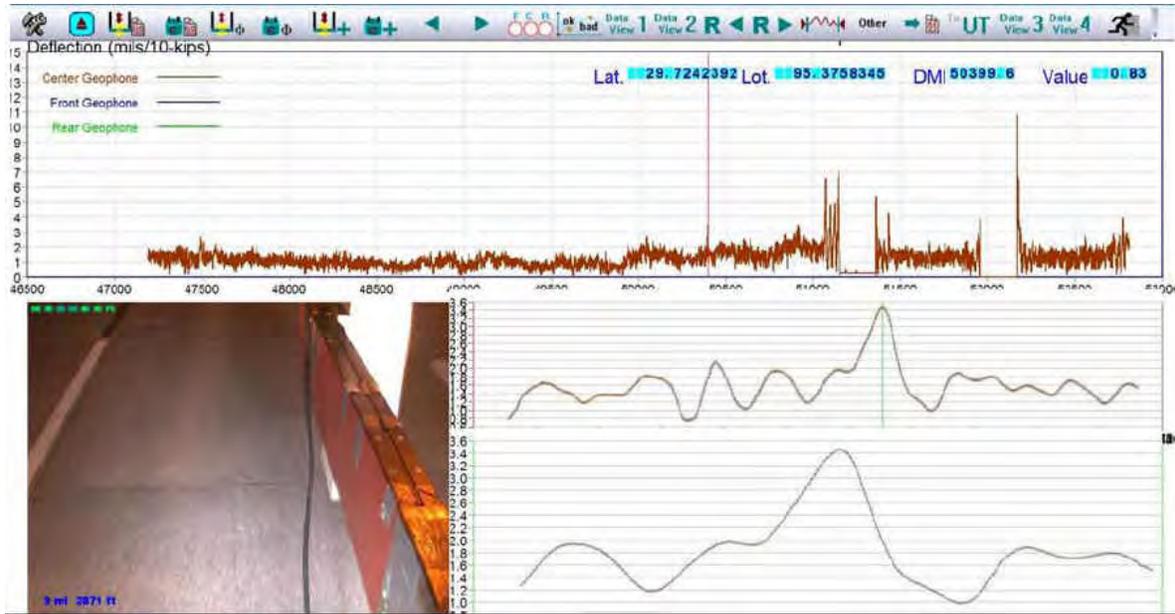


Figure 89: TPAD Data Collected on Lane 2 of Northbound – Part 6

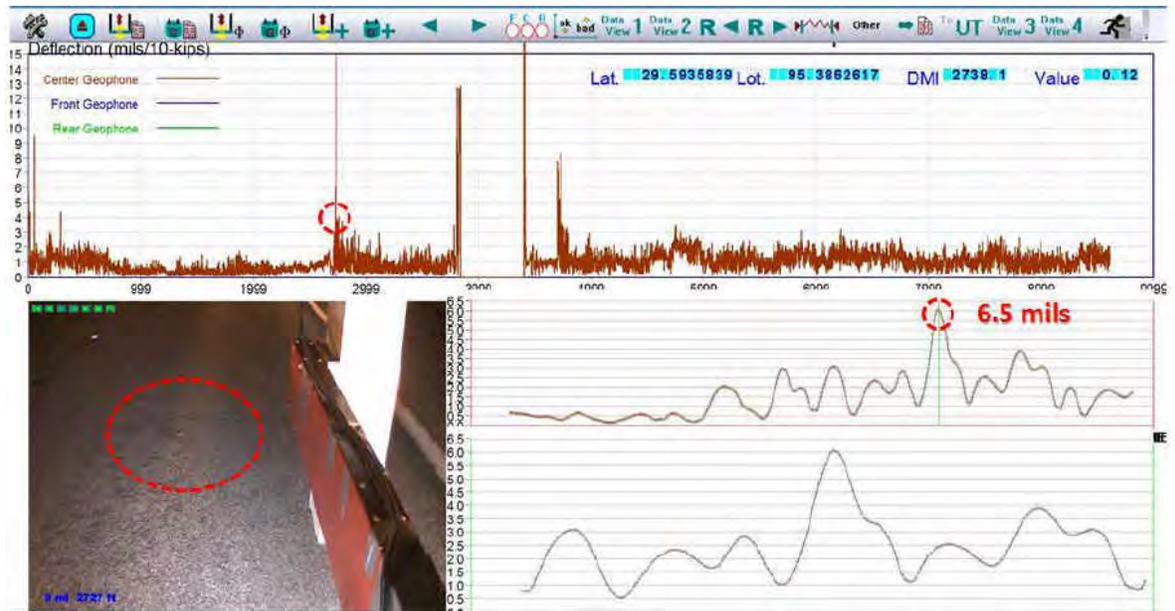


Figure 90: TPAD Data Collected on Lane 3 of Northbound – Part 1

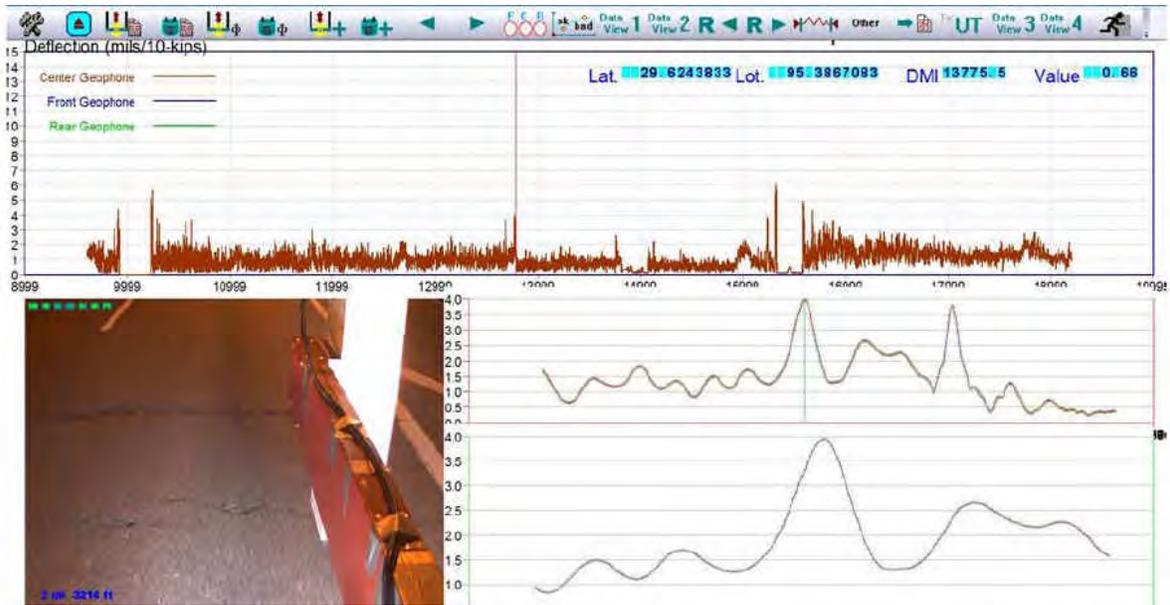


Figure 91: TPAD Data Collected on Lane 3 of Northbound – Part 2

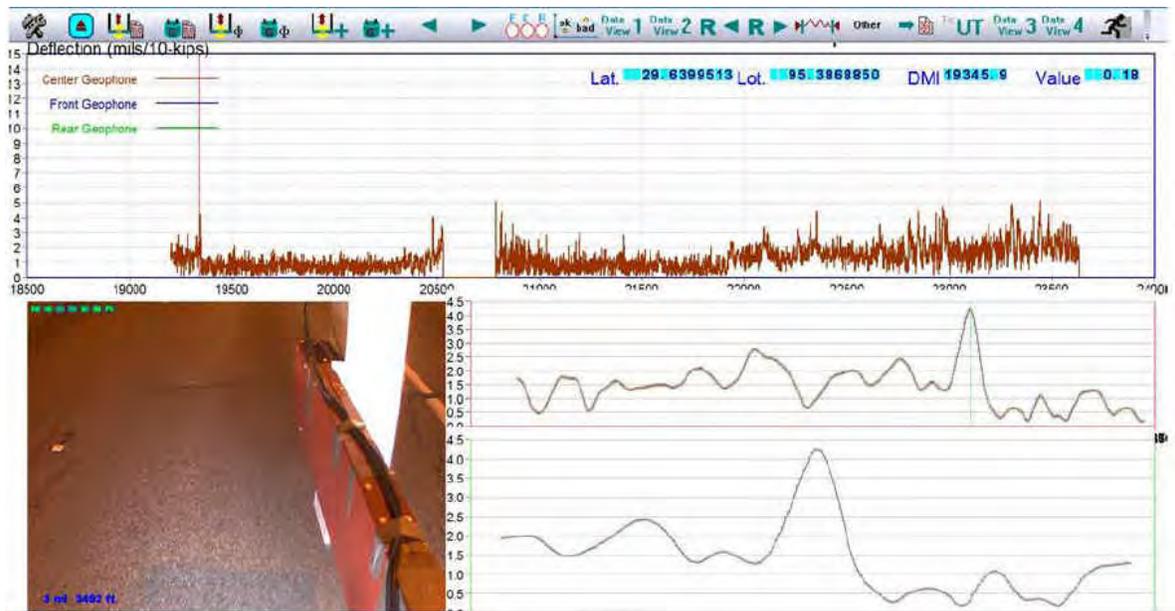


Figure 92: TPAD Data Collected on Lane 3 of Northbound – Part 3



Figure 93: TPAD Data Collected on Lane 3 of Northbound – Part 4

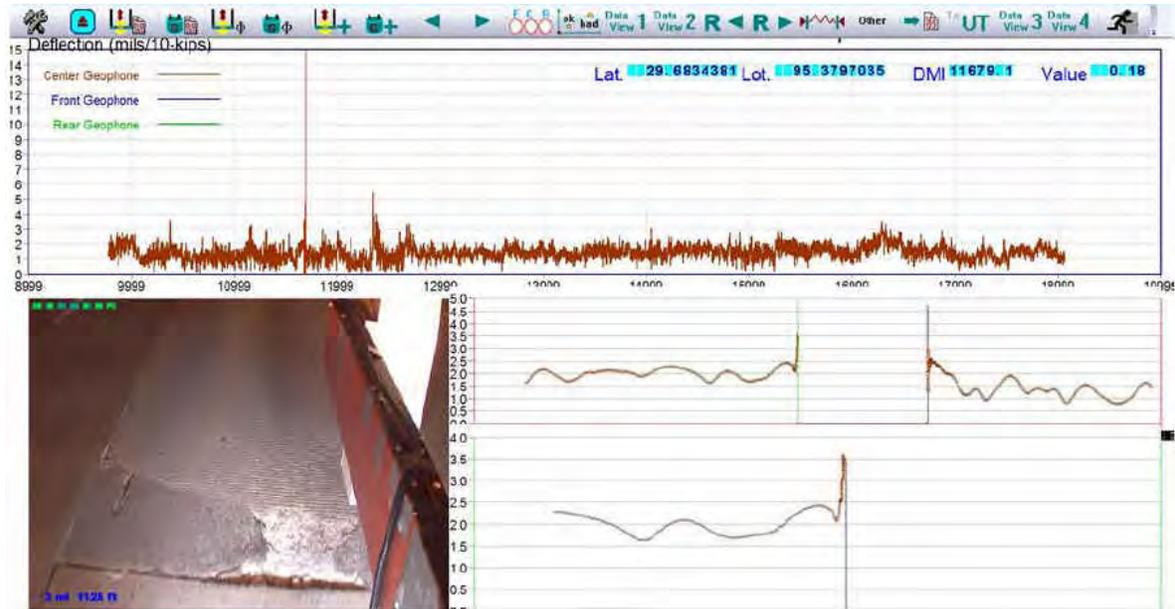


Figure 94: TPAD Data Collected on Lane 3 of Northbound – Part 5

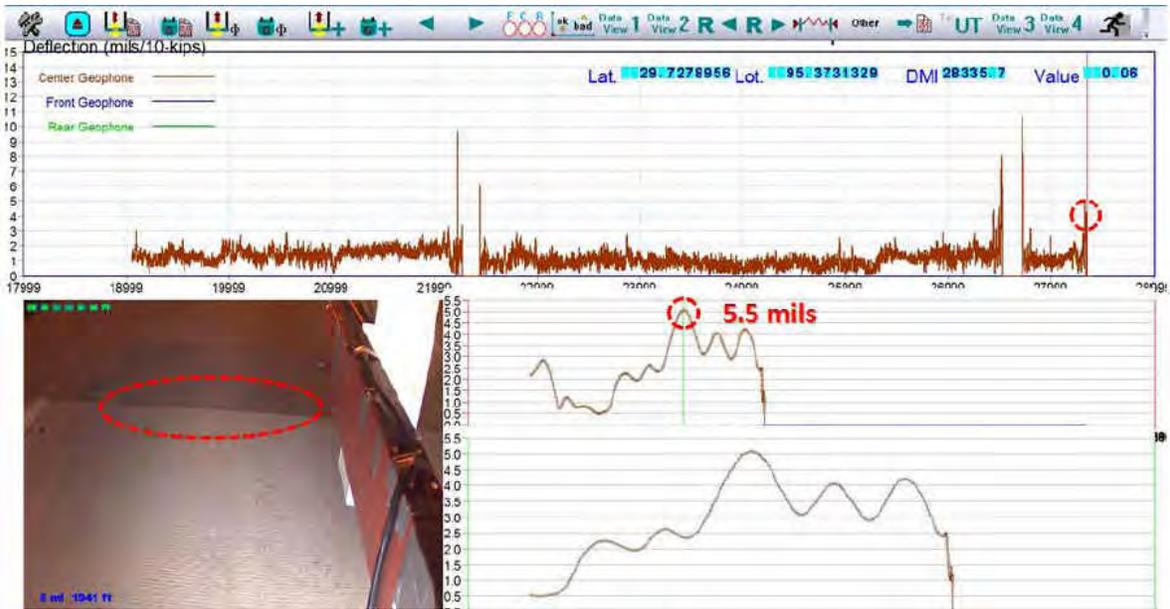


Figure 95: TPAD Data Collected on Lane 3 of Northbound – Part 6

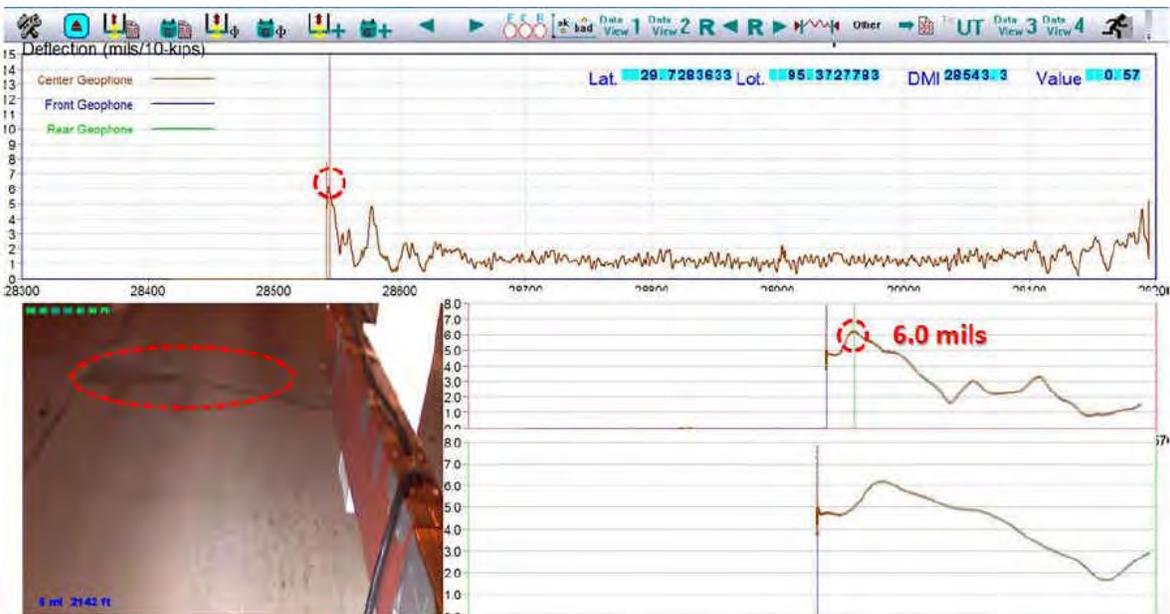


Figure 96: TPAD Data Collected on Lane 3 of Northbound – Part 7

## Reference

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Choi, P.G. and Won, M. (2014), "Evaluation of the Existing Pavement Condition on SH 288," Technical Memorandum, Tech Memo No.: 12-4XXIA028-4, Center for Multidisciplinary Research in Transportation, Texas Tech University.